# The consumption of live music in different languages: a quantitative approach

The consumption of

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### **Abstract**

**Purpose** – The consumption of music performed in different languages represents a significant aspect of the contemporary cultural experience. This phenomenon questions how different languages mediate music consumption in specific national contexts. In this paper, the authors investigate the case of live music consumption in France.

**Design/methodology/approach** – The authors surveyed 428 persons who saw 159 artists either performing in French or in English in 46 locations around Paris, France. The authors tested the effect of the language of the concert on three dimensions of music consumption: singing in unison, appraisal of the lyrics and dancing.

**Findings** – Multilevel analysis revealed that English was positively associated with dancing, whereas French was positively associated with the appraisal of the lyrics. The authors found no evidence that the language of the concert was associated with differences in singing in unison.

Originality/value – Results are discussed with respect to language diversity in the context of globalised popular music consumption.

Keywords Language, Music, Cultural diversity, Cultural consumption

Paper type Research paper

### Introduction

Music in different languages is at the heart of cultural production and consumption in our globalised world (Cicchelli *et al.*, 2018). It also contributes to multiple forms of cultural interactions (Ninoshvili, 2009) and identifications through social and emotional experiences (Taylor, 2014; Blommaert, 2010; Pennycook, 2006). This paper aims at examining differences in the consumption of music sung in different languages, in a context where the official national language coexists with a global and hegemonic language. The case of France embodies is quite well in such a context, given its historical relation to monolingual ideologies (Cerquiglini, 2006; Balibar, 1985) and its actual connections with global culture (Dauncey, 2017; Forsdick, 2017).

Indeed, French cultural consumption is nowadays characterised by an important linguistic mingling, especially between English and French. Younger generations consume a great deal of media contents in their original language. In 2008, more than half of the 15–29 years old watching TV mainly in a foreign language reported watching it in English (Octobre, 2014). They also listened to more international mainstream music in English than their elders: 41% of the 15–29 years old declared that they prefer listening to music in English (vs 11% for older generations; Octobre, 2014). In terms of diffusion, between 2006 and 2015, the share of French-language music broadcast on national radio experienced a 7% decrease (Véronique and Martiréné, 2015). In 2015, French politicians strongly criticised French commercial radios for the lack of language diversity of their programme, targeting the practice of plugging a small number of artists singing in French (Franque, 2015). Ten songs could sometimes



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represent 75% of the total number of French songs (Morio, 2015). It is worth noting that, since 1966, French radios are required to play at least 40% of songs in French (CSA, 1996). An amendment was made in 2015 to force radios to propose a more diverse range of music in French. However, digital native media such as music streaming platforms are not subject to any regulation with respect to language, thus creating tensions within the media industry (Reynaud, 2016).

The linguistic mingling of French music consumption is also ideological, as the international spread of English has often been theorised as cultural imperialism (Mattelart, 2015; Schiller, 1984), which can be defined as a mechanism through which hegemonic cultural and linguistic codes are imposed on dominated populations. In France, the use of English in the arts is often seen as carrying "American" values (e.g. individualism and consumerism), which is supposedly in opposition to an idealised set of "French" artistic values (e.g. non-commercial, serious and protest like, see Regourd, 2004; Wall, 1987). Historically, the so-called "Americanisation" of French society has been one of the main arguments for promoting protectionist policies within the cultural field (Poirrier, 2006), targeting music production and distribution. If the recent growth in the use of English within popular music radio airplay has rekindled the debate on cultural homogenisation, other studies on European countries' charts show that the number of national language songs is generally increasing again after a substantial decline in the 1980s and 1990s (Achterberg et al., 2011; Wolther, 2008). Additionally, the global digital context is increasingly viewed as favouring a new kind of mainstream pop music in other languages than English, such as Spanish and Korean (Sullivan, 2019). These multiple and apparently contradictory phenomena question how different languages coexist and how they are received by listeners in a same globalised cultural environment.

Our definition of language is based on the notion of social practice. In other words, languages are practices related to other dimensions of social activity and not objects or essences in a social vacuum (Pennycook, 2010). Languages are always local or "relocated" regardless of their national or foreign designation. Depending on the context, languages involve certain emotions. styles and identifications. For instance, English can be considered a "global" language because it responds to the unprecedented need of international communication (Crystal, 2012), but it is more than a "functional" tool of communication. Regarding music production, the sole fact that artists around the world use and adapt English proves the complexity of its meaning. Outside the English-speaking countries, popular music sung in English is not only related to a legacy of pop and rock (Larkey, 2000) or a way of going "global" (De Meyer, 1996), it can express transnational and counter-hegemonic identities, as in the cases of Brazilian manguebeat (De Figueiredo, 2015), Asian hip hop, (Alim and Pennycook, 2007) and Indonesian punk (Wallach, 2003). Yet English can also correspond to cultural homogenisation/standardisation as in the case of K-pop (Jin and Ryoo, 2014). As regards to national languages, such as French in France or German in Germany, they do not necessarily embody a fixed national identity or "ethnonational uniqueness" (Regey, 2011). They can express alternative versions of national belonging (Kahnke, 2013; Krause, 2008; Guibert, 2003; Larkey, 1992) or other social identities, such as class, gender or race. In postcolonial contexts, the use of a particular vernacular can index national identity and independence, such as in dancehall music in Jamaica (Farquharson, 2017; Devonish and Jones, 2017).

More generally, in popular music, singers not only use specific languages or language varieties to target specific audiences but also to perform what they consider to be authentic cultural identities in a globalised world (Duncan, 2017; Aleshinskaya and Gritsenko, 2017; Spanu, 2019a; Benson, 2013; Dorin, 2005; Mitchell, 2001). Here, authenticity is not to be understood as a fixed attribute but rather as a performance tied to specific social representations of what is original/unheard or legitimate/ritualised (Buch, 2014; Seca, 2009). This idea suggests that language reception in a musical context plays a certain role in defining authenticity and cultural identities (Van der Hoeven *et al.*, 2016).

The consumption of live music

In this paper, we aim at examining differences in the consumption – by French audiences – of music sung in two different languages: English and French. We chose to focus on one type of music consumption: live performances. Although music is nowadays widely distributed online and consumed individually (Sinclair and Green, 2016; Nowak and Bennett, 2014), concerts remain as a crucial part of the music experience (Cluley, 2009) and economy in modern societies (Ballico and Carter, 2018; Guibert and Sagot-Duvauroux, 2013; Holt, 2010). Empirical research in Belgium showed that artist-related variables, such as language, nationality and popularity, are the major determinants in the growth in ticket prices (Decrop and Derbaix, 2014). These results show the consumer's willingness to pay a higher price for artists performing in its own language than for artists performing in English, but they do not address the affective dimension of music consumption in regards to language.

Concerts are ideal and convenient environments to document and analyse people's verbal and non-verbal responses to music performances in relation to a language (Burland and Pitts, 2016). From the perspective of the audience, the principal manifestation of language is the lyrics sung by the artist. By definition, lyrics are the result of an interaction of language with musical features. In this sense, the reception of lyrics exceeds the usual pragmatic function of language and reaches what can be called a "poetic" function (Marc Martínez, 2011). This poetic function is predominantly related to the expression of emotions (Schubert, 2013). Previous empirical studies showed that textual and musical features can both be successfully used for emotion recognition in songs (Mihalcea and Strapparava, 2012), but also that lyrics appear to have more power to direct mood change compared to music alone, and can imbue a particular melody with affective qualities (Ali and Peynircioğlu, 2006; Stratton and Zalanowski, 1994).

The academic literature focused on language in popular music often relies on methodologies that aim to capture "literate" practices of listening (e.g. collective listening in a classroom and text interpretation). These methods are specific forms of "control of reception," as "the text visually presents itself as a structured unit and can be reconstructed as a coherent whole" (Moser, 2007, p. 292) and emphasise the textual value of a song [1]. However, lyrics can also be referred as "structures of sound" (Frith, 1989) in which languages matter less for the meaning they provide than for the way they mingle with the music. Nonverbal dimensions of language such as sound and rhythm play a crucial role in the reception of lyrics; the musicality of language "is integrated with music directly and therefore often figures as an instrument" (Moser, 2007, p. 295). Thus, as a first outcome variable of the consumption of language in music, we consider the extent to which the audience is emotionally affected by the lyrics during a concert, or, in other words, the extent to which individuals appreciate the lyrics.

This appreciation is necessarily related to a minimum level of understanding. Even if English is more and more taught and practiced among the French population, the level of proficiency remains rather moderate. Education First's database ranks France 22 out of 26 European countries, based on tests including reading and listening sections in English (Education First, 2019). In spite of high or low proficiency in English, the first language is typically felt to have superior emotional strength and resonance compared to languages that have been acquired later in life (Dewaele, 2015, 2010). In a musical context, it is likely that native French speakers are more receptive to the semantic aspects of the lyrics when a song is in French, as literal familiarity has a well-known effect on the social sharing of emotions (Cotton, 1981; Rimé, 2005; Schachter, 1964; Schachter and Singer, 1962). Thus, we formulated the following first hypothesis:

H1. Audience members will show a greater appreciation of the lyrics when the concert is performed in their native language (French) rather than in a foreign language (English).

We then need to consider other forms of language reception that entail various "body techniques" (Crossley, 2015), such as singing in unison and dancing. Singing in unison (also referred as singing along) is a relatively widespread and spontaneous practice among popular music audiences. It is a cooperative group activity that enables people to express engagement (Bennett, 1997) to communicate together (Jackson, 2004) and to feel virtually connected to the performing artist (Packer and Ballantyne, 2011), thus creating a certain sense of community (Ballou, 2009; Morton, 2013). Because nationhood is one of the most iconic forms of community, it is strongly related to the national language and still relevant in contemporary globalised societies (Jones and Merriman, 2009; Billig, 1995). Besides, due to necessary active linguistic and social engagement, the practice of singing along may not easily occur when the audience is less familiar with the language of the concert. Thus, we formulated the following second hypothesis:

H2. Audience members will sing more in unison when the concert is performed their native language (French) rather than in a foreign language (English).

Dancing is also a common body technique during popular music events, but it has often been dismissed as pure entertainment and opposed to more "serious" listening practices. In fact, this assumption is an aspect of "the way in which high culture was established in Europe and the United States in the nineteenth century" (Frith, 1989, p. 124). Classical performances command stillness and mental concentration, whereas popular music events trigger physical responses. However, this physical aspect goes far beyond a mindless listening practice or a calculative consumer action (Hewer and Hamilton, 2010). It suggests that the musical experience cannot always be interpreted in rational terms and may allow other forms of understanding/identification, especially through sensuality. More generally, dancing stands for both "collective" and "musical" participation, whereas the mind is associated with "individuality," "the self" (Frith, 1989, pp. 142–143) and the "unconscious of crowd" (Moscovici, 1985). In this sense, we can consider dancing as another manner of experiencing the music in relation to language, especially in the case of a foreign language that is less understood and familiar than the native language. Indeed, if the level of understanding and familiarity of the language sung is low, listeners will focus their attention on other musical aspects, such as rhythm, to create meaning and develop their own idea of authenticity (Szego, 2003). Thus, formulated the following third hypothesis:

H3. Audience members will dance more when the concert is performed in a foreign language (English) rather than in their native language (French).

The complete material (i.e. full questionnaire), raw de-identified dataset (in .xlsx and .csv) and Stata do-file enabling one to reproduce our findings can be found at https://figshare.com/s/7a5647251bae7a3ccece.

### Method

Participants and procedure

The study was conducted in two phases. The first half of participants (n = 234) completed our questionnaire in 2015. Given the lack of clarity in some findings, the other half of participants (n = 194) again completed our questionnaire in 2018. We adjusted the alpha level for multiple comparisons: as we collected the sample in two stages, the number of statistical tests was doubled, and the critical p-value was divided by two ( $\alpha_{\rm adj} = \alpha/2 = 0.025$ ) to maintain a type-I error rate of 5% (Cramer *et al.*, 2016).

Participants were recruited in two ways. They were either (1) directly reached after concerts within or around Paris and given a paper questionnaire or (2) contacted through the Facebook page of concerts and given a link to the online version of the same questionnaire [2].

A total of 428 participants took part in the study. Of participants, 18 were excluded *a priori* because they did not speak French as a first language, six others because the artist or band they saw performed in another language than English or French (i.e. our focal independent variable) and three others due to missing data. The final sample comprised N=401 participants who saw K=159 performing artists, located in 46 different venues (see Table A1 for the names of the artists and venues and most of which were located in Paris).

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There were 166 men and 235 women, with a mean age of  $M_{\rm age} = 33.13$  (SD = 11.48), and 44.64% of whom had a mother with a post-secondary diploma [3]. About half of the participants reported seeing an artist or band performing in English (n = 218, 54.36%), whereas the other half reported seeing an artist or band performing in French (n = 183, 45.64%) [4].

### Dependant variables

Appraisal of the lyrics. Using a scale ranging from 1 ("not at all") to 5 ("very much"), respondents reported the extent to which they had liked the lyrics during the show (M = 4.55, SD = 0.79) [5].

Singing in unison. Using a scale ranging from 1 ("never") to 5 ("on most of the songs"), respondents reported the frequency with which they had sung along during the show (M = 2.97, SD = 1.30).

Dancing. Using a scale ranging from 1 ("never") to 5 ("on most of the songs"), respondents reported the frequency with which they had danced, moved or physically responded to the music in any manner during the show (M = 4.25, SD = 1.22).

### Control variables

English language skills. Using a scale ranging from 1 ("a few words") to 4 ("bilingual"), respondents reported the extent to which they mastered the English language (M = 2.78, SD = 0.85).

Attachment to the artist before the concert. Live music experience and engagement is known to be determined by preparation and anticipation (Burland and Pitts, 2016), for instance through the prior relation to the performing artist. Moreover, previous research on the Parisian indie scene indicated that the level of attachment to a band is modulated by a language, thereby influencing one's behaviours during concerts (Spanu and Seca, 2016). We therefore assessed and controlled for this variable: Using a scale ranging from 1 ("never") to 5 ("more than 50 times"), respondents reported the number of times they had listened to the concert artist's music in the past six months (M = 3.82, SD = 1.21).

Concert attendance. Live music experience and engagement is known to be also determined by concert-goers habits (Burland and Pitts, 2016) and, in particular, by one's frequency of attendance to concerts. Previous ethnographic research indicated that frequent concertgoers tend to observe more and pay specific attention to lyrics during the concert (Spanu and Seca, 2016). We therefore assessed and controlled for this variable: using a scale ranging from 1 ("none") to 5 ("at least once a week"), respondents reported the number of concerts they had attended in the past months (M = 3.28, SD = 0.89).

Accompanying. Previous ethnographic research indicated that individual concertgoers tend to observe more and pay a specific attention to lyrics during the concert compared to groups (Spanu and Seca, 2016). We therefore assessed and controlled for this variable: respondents reported if they came to the concert alone (18.70%) or accompanied (81.30%).

Patriotic attitudes. Extant research indicated that patriotic attitudes are positively associated to domestic cultural consumption (Bekhuis *et al.*, 2013; Meuleman *et al.*, 2013; Meuleman and Lubbers, 2014). We therefore assessed and controlled for this variable: using a scale ranging from 1 ("not proud at all [of my nationality]") to 5 ("very proud"), respondent reported the extent to which they had patriotic attitudes (M = 3.56, SD = 1.20).

### Results

Overview of the multilevel analysis

We used cross-classified multilevel linear regression modelling. We treated participants (level-1 units) as cross-classified by artists (level-2a units) and by venues (level-2b units). This approach enabled us to disentangle the between-participant variance from both the within-artist and the within-venue variance. The units are said to be cross-classified because participants seeing a given artist or band are not necessarily subclassified into the same venue (i.e. as similar artists may perform in different places and vice versa). Given the complexity of the data structure, we used MCMC (with 50,000 iterations) as the estimation method (Dunn *et al.*, 2015). It uses the Bayesian framework and we report both Bayesian 95% credibility intervals and traditional frequentist *b*-values. As previously stated, an adjusted alpha of 0.025 was used as the cut-off for significance.

Each outcome variable (i.e. appraisal of the lyrics, singing in unison and dancing) was linearly regressed on our focal level-2 independent variable, namely the language of the artist (-0.5 = English; +0.5 = French). We controlled for the following lower level covariates: sex (-0.5 = male; +0.5 = female), age, mother's education, English language skills, attachment to the artist before the concert, concert attendance, accompanying (-0.5 = alone; +0.5 = accompanied) and patriotic attitudes. The same three models excluding the aforementioned covariates are presented in Table A2. Random effects were theoretically non-relevant and were not taken into account (see Sommet and Morselli, 2018).

For each outcome variable, we ran two series of preliminary analyses. First, we built an unconditional means model (including no predictors) in order to estimate the intraclass correlation coefficients (ICCs). Second, we ran a complete analysis of covariance aimed at determining the need for controlling the first-order interactions with our focal independent variable (i.e. language of the artist; see Yzerbyt *et al.*, 2004).

## Appraisal of the lyrics

Preliminary analyses. First, the unconditional means models revealed that at level 2a,  $ICC_{2a} = 0.03$ , whereas at level 2b, it was  $ICC_{2b} = 0.06$ . This indicated that 3% of the variance in the appraisal of the lyrics was explained by between-artist differences and 6% of the variance was explained by between-venue differences. Second, the analysis of covariance revealed an interaction between language and attachment to the artist. Thus, the interaction was kept in the final model.

*Main analysis.* Table 1 (first column from the right) presents the full set of predictors and results. Consistent with our first hypothesis, we observed a positive effect of language, B = 0.30, 95% CI [0.15, 0.45], p < 0.001 (see Figure 1, left panel). Specifically, participants seeing artists performing in French, M = 4.72, 95% CI [4.56, 4.87] reported liking the lyrics better than participants seeing artists performing in English, M = 4.42, 95% CI [4.28, 4.55].

As mentioned previously, we observed an interaction between language and attachment to the artist, B = -0.20, 95% CI [-0.32, -0.09], p < 0.001. Specifically, the effect of language on appraisal of the lyrics was positive for participants with low levels of attachment to the artist (+1 SD), B = 0.55, 95% CI [0.35, 0.76], p < 0.001 but not different from zero for participants with high levels of attachment to the artist (-1 SD), B = 0.05, 95% CI [-0.16, -0.26], p = 0.319 (see Figure 2).

Additionally, we observed effects of three of our covariates. First, appraisal of the lyrics was lower for men than for women, B = -0.21, 95% CI [-0.35, -0.07], p = 0.003. Second, appraisal of the lyrics was positively associated with attachment to the artist, B = 0.28, 95% CI [0.22, 0.34], p < 0.001.

### Singing in unison

*Preliminary analyses.* First, the unconditional means models revealed that at level 2a,  $ICC_{2a} = 0.28$ , whereas at level 2b, it was  $ICC_{2b} = 0.14$ . This indicated that 28% of the variance

in singing in unison was explained by between-artist differences and 14% of the variance was explained by between-venue differences. Second, the analysis of covariance did not reveal significant interactions between language and our covariates. Thus, none of the interaction terms were kept in the final model.

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*Main analysis.* Table 1 (second column from the right) presents the full set of predictors and results. Inconsistent with our second hypothesis, the effect of language was not significantly different from zero, B=0.22, 95% CI [-0.08, 0.51], p=0.140 (see Figure 1, middle panel).

However, we observed effects of two of our covariates. First, singing in unison was lower for men than for women, B = -0.37, 95% CI [-0.59, 0.17], p = 0.001. Second, singing in unison was positively associated with attachment to the artist, B = -0.42, 95% CI [0.34, 0.51], p < 0.001.

### Dancing

Preliminary analyses. First, the unconditional means model revealed that at level 2a,  $ICC_{2a} = 0.26$ , whereas at level 2b, it was  $ICC_{2b} = 0.02$ . This indicated that 26% of the variance in dancing was explained by between-artist differences and 2% of the variance was explained by between-venue differences. Second, the analysis of covariance revealed an interaction between language and concert attendance. Thus, this interaction term was kept in the final model.

*Main analysis*. Table 1 (third column from the right) presents the full set of predictors and results. Consistent with our third hypothesis, we observed a negative effect of language on dancing, B = -0.47, 95% CI [-0.82, -0.14], p = 0.006 (see Figure 1, right panel). Specifically, participants seeing artists performing in French, M = 3.84, 95% CI [3.55, 4.14], danced less than participants seeing artists performing in English, M = 4.32, 95% CI [4.08, 4.56].

As mentioned previously, we observed an interaction between language and accompanying,  $B=0.68,\,95\%$  CI [0.09, 1.27], p=0.024. Specifically, the effect of language on dancing was negative for participants attending concerts alone,  $B=-0.82,\,95\%$  CI [ $-1.38,\,-0.26$ ], p=0.004, but not different from zero for participants attending concerts accompanied,  $B=-0.14,\,95\%$  CI [ $-0.44,\,-0.16$ ], p=0.376 (see Figure 3).

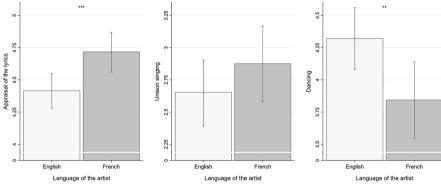
	Appraisal of the lyrics		Unison singing		Dancing	
	$\overline{B}$	95% CI	B	95% CI	B	95% CI
Intercept	4.57***	[4.44, 4.69]	2.77***	[2.53, 2.99]	4.08***	[3.87, 4.29]
Language of the artist $(-0.5 = \text{English}; +0.5 = \text{French})$	0.3***	[0.15, 0.45]	0.22	[-0.08, 0.51]	$-0.48^*$	[-0.82, -0.14]
Sex $(-0.5 = \text{male}; +0.5 = \text{female})$	$-0.21^{**}$	[-0.35, -0.07]	$-0.38^{**}$	[-0.59, -0.17]	$-0.36^{**}$	[-0.59, -0.14]
Age	0	[0, 0.01]	0	[-0.01, 0.01]	-0.01	[-0.02, 0]
Mother's education level	-0.07	[-0.21, 0.08]	-0.13	[-0.34, 0.09]	-0.15	[-0.38, 0.09]
English language skills	-0.02	[-0.19, 0.16]	0.24	[-0.02, 0.51]	$0.41^{*}$	[0.11, 0.7]
Attachment to the artist	-0.03	[-0.11, 0.06]	0.07	[-0.05, 0.2]	-0.04	[-0.18, 0.1]
Concert attendance	0.28***	[0.22, 0.34]	0.42***	[0.34, 0.51]	0.18***	[0.08, 0.28]
Accompanying $(-0.5 = \text{alone}; +0.5 = \text{accompanied})$	$-0.09^{\dagger}$	[-0.17, -0.01]		[-0.25, 0.01]	-0.08	[-0.22, 0.06]
Patriotic attitudes	-0.03	[-0.09, 0.03]	-0.03	[-0.12, 0.06]	0.02	[-0.07, 0.12]
Language of the artist x attachment	$-0.21^{***}$	[-0.32, -0.1]		, ,		L, ]
Language of the artist x accompanying		. , ,			$0.68^*$	[0.09, 1.27]
Venue random intercept variance	0.01	[0, 0.05]	0.1	[0, 0.33]	0.02	[0, 0.1]
Artist random intercept variance	0.02	[0, 0.08]	0.39	[0.2, 0.64]	0.25	[0.08, 0.48]
Level 1 residuals	0.44	[0.37, 0.51]	0.81	[0.68, 0.96]	1.06	[0.89, 1.27]

**Note(s)**: Left reverse bracket indicates that the zero is excluded from the 95% CI;  $^{\dagger}p < 0.05$ ,  $^{**}p < 0.025$ ,  $^{**}p \le 0.005$  and  $^{***}p \le 0.0005$ 

Table 1.
Coefficient estimates
(Bs) and 95%
credibility intervals
(95% CIs) for the crossclassified multilevel
linear regression
models estimating the
effects of the language
of the artist and the
covariates on appraisal
of the lyrics, unison
singing and dancing

Finally, we observed effects of three of our covariates. First, dancing was lower for men than for women, B=-0.36,95% CI [-0.59,-0.14], p=0.002. Second, dancing was higher for participants attending the concert accompanied than alone, B=0.40,95% CI [0.11,0.70], p=0.007. Third, dancing was positively associated with attachment to the artist, B=0.18,95% CI [0.08,0.28], p<0.001.

Figure 1. Effect of the language of the artist (English vs French) on appraisal of the lyrics (left panel), unison singing (middle panel) and dancing (right panel)



**Note(s):** Error bar are 95% CI; \*\* $p \le 0.005$ , \*\*\* $p \le 0.0005$ 

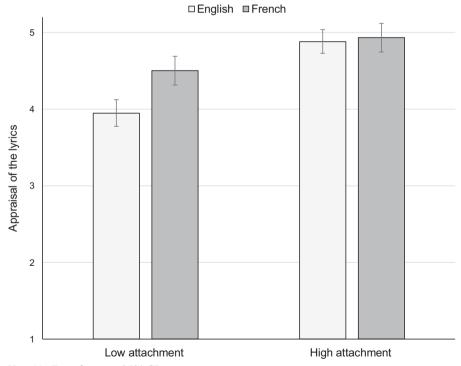
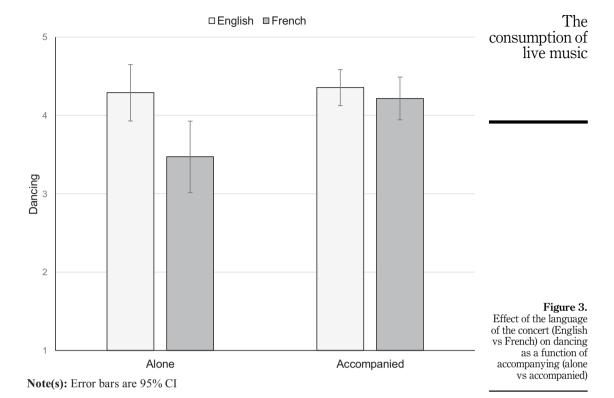


Figure 2. Effect of the language of the concert (English vs French) on appraisal of the lyric as a function of attachment to the artist (low [-1 SD] vs high [+1 SD])

Note(s): Error bars are 95% CI



### Discussion

The present research aimed to examine the impact of language on three dimensions of live music consumption in Paris: the appraisal of the lyrics, singing in unison and dancing.

### French predicts a better appraisal of the lyrics than English

We expected to observe an effect of the language of the concert on the appraisal of the lyrics, as a result of a relatively better understanding and familiarity of the national language (H1). Congruent with that prediction, we found that participants who attended concerts in French liked the lyrics better than participants who attended concerts in English. This effect interacted with the level of familiarity with the performing artist: we observed that the likeliness to appraise the lyrics in English was lower when the participant was little familiar with the artist, which was less the case for concerts in French. In other words, appraising the lyrics in English requires more preparation and anticipation; it is not as spontaneous or "natural" as when the concert is in French. This result reinforces the difference between French as a "native" language and English as a foreign language (in spite of the hegemonic and global status of English).

However, it is worth noting that – in preliminary analysis – the effect of English proficiency did not moderate the effect of language on appraisal of the lyrics. In other words, participants seeing artists performing in French reported liking the lyrics better than participants seeing artists performing in English, *regardless of their language proficiency*. Similar findings can be found in studies on French consumption of cultural goods, in which

the consumption of goods in English is not correlated to a better level of English understanding (Cicchelli and Octobre, 2015). This phenomenon can be explained by the idea of "aesthetics of reception" where the literal content (i.e. lyrics) is not the centre of attention within the reception experience. Indeed, here, we cannot refer to a content-based explanation (i.e. lyrics in French are of greater quality than those in English) due to the absence of objective indicator, but the idea of "aesthetics of reception" suggests that non-native English speaking listeners pay less attention to the content of the lyrics when the concert is in English rather than in their native language. In our case, the French audience pays specific attention to the lyrics when the language of the concert is French rather than English, which is in line with a recurrent discourse within the independent French music scene (Spanu and Seca, 2016). This disposition towards the lyrics can be understood not only as a simple ability to understand the content of the lyrics that correspond to the native language but also as a more general and social "attitude" or "habit" towards national "native" languages vs the global pop idiom. It is a specific social behaviour regarding the way we experience locality in relation to language (i.e. music in national language corresponds to a greater expectation towards lyrics than music in English, regardless of the level of understanding of the latter). Currently, we still do not know if this listening practice is a French specificity or relates to a broader sense of national belonging, but we can suggest that it relates to the typical "sacralisation" and institutionalisation of national languages that occurs in most nation states, as opposed to asemantical perceptions and practices of language that English as a foreign, hegemonic language and somehow "accessible" language fosters (Spanu, 2019b) [6]. Further studies should test if this difference towards lyrics not only exists between English and other national languages but also in other listening contexts.

# Language of the artists does not predict singing in unison

We expected an effect of the language of the concert on singing in unison as a result of a greater familiarity with the national language (H2). Incongruent with that prediction, we did not observe such an effect. On the one hand, one reason can be that singing in unison does not necessarily require repeating the exact same words as the artist, which enables the audience to sing regardless of their language proficiency. On the other hand, contextual variables, such as the vocal performance in itself might incite sing-along behaviours to a greater degree than internal language structure (Pawley and Müllensiefen, 2012). Indeed, the hegemonic and transnational nature of English might be involved: French people regularly listen to music in English through media, thereby being able to mimic its sounds and collectively identify with transnational music cultures as much as French culture. In addition to a sense of community, singing along is claimed to be related to intense revelry and "leaving the everyday life behind" (Pawley and Müllensiefen, 2012), which could favour the use of a foreign language such as English. But here the role of domestic vs foreign language remains unclear both allowing to escape everyday life and build communities.

We can also argue that, as a music practice, singing in unison does not create a dichotomy between national and international language in the reception of popular music. In terms of global aesthetics, we can, thus, consider singing along not only as an active mode of music consumption but also, in this case, as an inclusive practice on a linguistic level. Further studies should test if this absence of difference also exists between other languages, especially non-hegemonic ones.

### English predicts more dancing than French

Finally, we expected an effect of the language of the concert on dancing as a result of a lower degree of understanding during concerts in English and a greater focus on the body (H3). Congruent with that prediction, we did observe a negative effect of language, meaning that

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participants who attended concerts in French danced less than those who attended concerts in English. Two non-mutually exclusive reasons might help understand this effect. First, we could formulate a strictly linguistic interpretation: the English language is "stress-timed," whereas the French language is "syllable-timed" (Otake *et al.*, 1993). This difference in "language rhythm" might be associated to more danceable music features, therefore enhancing dancing practices during concerts in English. However, dancing is a social and cultural practice that cannot be entirely determined by internal language elements.

Indeed, the effect may be accounted for by the fact that France has a long tradition of "chanson française," a type of popular music whose authenticity relies on the clarity and refinement of the lyrics, whereas international pop music emphasises more the rhythm, the groove and the melody (Marc, 2014; Guibert, 2006; Looseley, 2003). This tradition resulted in the sedimentation of a French standard of production/composition in which lyrics are the focal point of music in French (Prévost-Thomas, 2018), while the body-based listening experience is more related with international pop in English (although it exists in French pop as a "minor" experience). In other words, the "foreign" language is relocated and appropriated through a specific type of embodiment in a musical context.

Besides, as a social practice, dancing is associated with the collective experience of music, especially with people we personally know. We observed that participants danced less only when the concert was in French and they were alone at these shows. One explanation could be that – similarly to unison singing's contextual variables – there is a "group" effect (due to the presence of friends) that enhances dancing, especially for shows in French that tend to be less danceable.

### Conclusion

The results of our survey on live music consumption can be summarised as follows: English is positively associated with dancing, whereas French is positively associated with the appraisal of the lyrics while there was no evidence that the language of the concert was associated with differences in singing in unison. These results suggest the existence of a continuum between English and French in the context of live music consumption, where the English end is shrouded in mist in regards to lyrics, which makes its reception more mysterious and at least as exciting as the French end, but in a more embodied and collective way. All three variables were associated with previous listening to the artist, which emphasises the overall affective dimension of live music consumption and its inclusion in personal histories of cultural practices. The results are also in line with the common thought that French audiences pay a specific attention to the lyrics and confirm the idea that music in French tends to be less danceable and favour "intellectual" music consumption to some extent. This social representation is common among French bands and somehow explains the widespread practice of English singing in France, even though many counterexamples exist. Indeed, several singers do manage to make people dance when singing in French (see Stromae and Yelle for recent examples). However, the increasing use of English within French mainstream pop seems to reinforce the dichotomy between the two languages (danceable vs text based), as shown by what could be called a "code-switching composition pattern": verses are softly sung in French while choruses are intensely sung in English [7]. Further studies should test if the difference towards lyrics production and consumption in foreign and hegemonic language vs native language also exists in similar national contexts and other local contexts where languages are practiced and distributed differently (Spanu, 2020; Seca, 2020; Poliakov et al., 2020).

Besides, if we want to understand better the local meaning of languages in globalising musical contexts, we need to reconsider its relation with the symbolisation of the body in pop music (Seca, 2001), which should include a broader reflexion on gender (Thornton, 2006), as

our results show that dancing was lower for men than for women. For instance, further studies on language reception and popular music consumption should test whether music from different countries performed in national language involves less dancing than international music in English and how it relates to gender.

The implications of these results for practitioners, policy makers and music professionals consist in a new way of considering language diversity, beyond a simple opposition between languages (domestic/native vs foreign), in the form of a continuum where languages are being practiced and experienced differently in specific localised contexts (Spanu, 2019a; Squires, 2019; Pennycook, 2010). More generally, this idea of a continuum relies on the fact that languages in musical contexts are deeply versatile, their meaning evolves constantly, depending on the many situations in which we listen to music (e.g. at home, in festivals, alone or with friends at a party, etc.) and always relate to other dimensions of social life (the body, national belonging, the gendered ritualisation of emotions, etc).

### Notes

- Even in the case of collective listening in a classroom, responses to the content of lyrics is ambivalent regarding comprehension, as shown by empirical studies on protest songs (Robinson and Hirsch, 1972).
- 2. The fact that the survey took place in Paris inherently limits the possibility to generalise the discussion to the rest of the country. Indeed, the Parisian population surveyed here is characterised by its relatively high education level, high English proficiency and cosmopolitan environment.
- Mother's level of education is a more reliable indicator of social class than father's level of education (Schultz, 2002).
- 4. Three participants saw an artist or band mostly performing in English (i.e. Lenny Kravitz, Cats on Trees and Nicolas Cavallaro) and incorrectly indicated that the language of the concert was French. These three mistakes were corrected and their responses were changed to "English."
- 5. Other variables were tested in the first version of the questionnaire, such as clarity of the singing parts and level of understanding the lyrics, but they were not included in the present analysis.
- But other foreign or regional languages (Spanu, 2015) and even invented languages (Mansion-Vaquié, 2020) or "yaourt" (Cutler, 2000) could be considered to explore these asemantical dimensions of music (although as a minor phenomenon).
- Some examples: "J'ai cherché" (2016) and "On dirait" (2016) from Amir, "Paris—Seychelles" (2013) from Julien Doré, "Mon Everest" (2016) from Soprano feat. Marina Kaye, "Le Temps qu'il faut" (2016) and "Are We Awake" (2016) from Tal, "Open Season (Une autre saison)" (2015) from Josef Salvat.

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# AAM Appendix

l	Artist/band	Language	Location
	Adron	French	New Morning
	Albin de la Simone	French	Philharmonie de Paris
	Alvvavs	English	Badaboum
	Angèle	French	Olympia
	A perfect circle	English	Olympia
	Arkadin Oscar	French	FNAC Live
	Arthur H	French	Salle Pleyel
	Astonvilla	French	Maroquinerie
	Benabar	French	Grand Rex
).	Benjamin Biolay	French	Folies Bergères
l.	Billy Idol	English	Zenith
	Blind Digital Citizen	French	Badaboum
3.	Booba	French	U Arena
l.	Borns	English	Trabendo
).	Brigitte	French	Olympia
). S.	Britney Spears	English	Accorhotel Arena
5. 7.	BRNS	English	Petit bain
	Caesaria	English	Trois Baudets
3. 9.			
	Calogero	French	Accorhotel Arena
).	Cats on trees	English	Cigale
l.	Charlie Winston	English	Trianon
2.	Christine and the queens	French	FNAC Live
3.	Claire Laffut	French	Trois baudets
1.	Colombine	French	Olympia
<u>.</u>	Coming Soon	English	Point Éphémère
<b>3</b> .	Concrete Knives	English	Maroquinerie
7.	Corine	French	FGO Barbara
3.	Corson Ollebirde	English	La Cigale
). 9.	Courtney Barnett	English	Bataclan
). ).	Courtney Marie Andrews	English	Petit Bain
	Cvril Mokaiesh	French	FNAC Live
l.			
2.	Dead sea	English	Badaboum
3.	Debout sur le Zinc	French	Petit Bain
1.	Demi portion	French	Olympia
5.	Di-meh	French	Boule Noire
5.	Dinos	French	Boule Noire
7.	Disiz	French	Citadium
3.	Django django	English	FNAC Live
).	Drenge	English	Grand rex
).	EDH	English	Espace B
i.	ED Sheeran	English	Trianon
)	Elliot Maginot	English	Pop up du label
2. 3.	En Attendant Ana	English	Maroquinerie
l. -	Feu! Chatterton	French	Trianon
5.	First Aid Kit	English	Cabaret Sauvage
5.	François and The Atlas Mountains	English	Philharmonie de Paris
7.	Fred Chapellier	English	Longlaville
	Gaspard Royant	English	Folies Bergères
).	Gauvain Sers	French	La Cigale
).	Govrache	French	Café de la danse
	Grand Blanc	French	Solidays
2.	Her	English	Olympia
3.	Hindi Zahra	English	Philharmonie de Paris
j. 1.	Hinds	English	Point Éphémère
).	Holly Miranda	English	Point Ephémère
o. o.			
	Hyphen hyphen	English	Solidays
7.	IAM	French	Solidays
3.	Ibevi	English	Philharmonie de Paris

**Table A1.** List of the artists and locations

(continued)

59. 50. 51. 52. 53. 54. 55. 66. 57. 58. 59. 70. 71.	Iceage Ilaria Graziano Imany In the canopy Iron Maiden Isaac delusion Izia Jack White Jeanne added Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English	Petit Bain Maroquinerie New Morning Divan du monde Zenith Casino de Paris Solidays Olympia FNAC Live Trianon	— consumption of live music
51. 52. 53. 54. 55. 56. 57. 58. 59. 70. 71.	Imany In the canopy Iron Maiden Isaac delusion Izia Jack White Jeanne added Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English	New Morning Divan du monde Zenith Casino de Paris Solidays Olympia FNAC Live	iive music
52. 53. 54. 55. 56. 57. 58. 59. 70.	In the canopy Iron Maiden Isaac delusion Izia Jack White Jeanne added Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English English English English English English English English English	Divan du monde Zenith Casino de Paris Solidays Olympia FNAC Live	
53. 54. 55. 56. 57. 58. 59. 70. 71.	Iron Maiden Isaac delusion Izia Jack White Jeanne added Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English English English English English English English	Zenith Casino de Paris Solidays Olympia FNAC Live	
54. 55. 66. 67. 68. 69. 70. 71.	Isaac delusion Izia Jack White Jeanne added Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English English English English English English English	Casino de Paris Solidays Olympia FNAC Live	
55. 66. 67. 68. 69. 70. 71.	Izia Jack White Jeanne added Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English English English English English	Solidays Olympia FNAC Live	
6. 7. 8. 9. 0. 1. 2.	Jack White Jeanne added Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English English English English	Olympia FNAC Live	
7. 8. 9. 0. 1. 2.	Jeanne added Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English English English	FŇAĈ Live	
88. 69. 70. 71.	Jesus and Mary Chain John Baez Josh T. Pearson Julien Doré	English English		
9. 0. 1. 2.	John Baez Josh T. Pearson Julien Doré	English	Trianon	
70. 71. 72.	Josh T. Pearson Julien Doré			
71. 72.	Julien Doré		Olympia	
72.	3	English	Maroquinerie	
		French	Olympia	
J.	Keen'V	French	Zenith Boule Noire	
4.	Killy	English	Bataclan	
4. '5.	L7 La Bronze	English French	Trois Baudets	
6.	Las Aves	English	Badaboum	
7.	Lauren Auder	English	Pop up du label	
7.	Lavilliers	French	Fête de l'Huma	
9.	Lenny kravitz	English	Olympia	
30.	Leonie	French	Carmen	
1.	Les amants	French	FGO Barbara	
2.	Les négresses vertes	French	Cabaret Sauvage	
3.	Les Ogres de Barback	French	Trianon	
4.	Leyya	English	Point Éphémère	
5.	Liam Gallagher	English	Rock en Seine	
6.	Limp bizkit	English	Bataclan	
7.	Lofofora	French	Maroquinerie	
8.	Lukas Ionesco	English	Trois Baudets	
9.	Mabel	English	Maroquinerie	
0.	Mademoiselle k	English	Solidays	
1.	Malo'	English	Café de la danse	
2.	Manolo	English	Pop up du label	
3.	Mariscal	French	Café de la danse	
4.	Masego	English	Trianon	
5.	Mesparrow	English	Petit Bain	
6.	Mices	English	Petit Bain	
7.	Milkandbone	English	Boule Noire	
3.	Minuit	French	FNAC Live	
9.	Mumford and sons	English	Olympia	
00.	Mustang	French	Folies Bergères	
01.	Natas Loves You	English	Point Ephémère	
02.	Nathalie Prass	English	Maroquinerie	
03.	Nekfeu	French	FNAC Live	
04.	Nev Cottee	English	FGO Barbara	
05.	Nick Cave Nickelback	English	Grand Rex	
06.	- 1-0-1-0-10-10-1	English	Palais des sports	
)7.	Nicola cavallaro	English	Café de la danse	
08. 09.	Night beats Niska	English French	Point Éphémère Zenith	
10.	Noah Kahan		Boule Noire	
10. 11.	Noel Gallagher	English English	Grand Rex	
2.	Nungan	English	Bus palladium	
12. 13.	Of monsters and men	English	Trianon	
.s. 4.	Oldelaf	French	Trianon	
14. 15.	Orouni	English	Trois Baudets	
16.	Ought	English	Maroquinerie	
10. 17.	Peach pit	English	Cabaret Sauvage	
18.	Pierre Lapointe	French	FNAC Live	

(continued)

Table A1.

Id	Artist/band	Language	Location
119.	Pogo car crash control	French	Maroquinerie
120.	Pomme	French	La Cigale
121.	Rémi Parson	French	Espace B
122.	Rhys Lewis	English	Pop up du label
123.	Ringo Starr and his all starr band	English	Olympia
124.	Roger jr	French	Trois Baudets
125.	Roger waters	English	U Arena
126.	Romance	French	Trois Baudets
127.	Rostam	English	Point Éphémère
128.	Sam Smith	English	Zenith
129.	Sarah Blasko	English	Trois Baudets
130.	Scorpions	English	Accorhotel Arena
131.	Sébastien Schuller	English	Maroquinerie
132.	Skip the use	English	Place de la République
133.	Sophie Hunger	English	La Cigale
134.	State Champs	English	Maroquinerie
135.	Still	English	Maroquinerie
136.	Sting	English	Olympia
137.	StU	English	Bataclan
138.	Svinkels	French	Olympia
139.	Temples	English	Grand Rex
140.	Tess Parks and Anton Newcombe	English	Maroquinerie
140.	The Bawdies	English	Boule Noire
141.	The Cage	English	Rock en Seine
142.	The cage The go team	English	Maroquinerie
143. 144.	The horrors		Trianon
144. 145.	The Kinds	English	
		English	Maroquinerie
146.	Thérapie taxi	French	La Cigale
147.	The War On Drugs The Who	English	Philharmonie de Paris
148.		English	Zenith
149.	Thomas Dutronc	French	Flow
150.	Two Feet	English	Boule Noire
151.	Vianney	French	Accorhotel Arena
152.	Victor Osair	French	Trois Baudets
153.	Vince Staples	English	Elysée Montmartre
154.	Wild Child	English	Trois Baudets
155.	Yelle	French	Hippodrome de Longcham
156.	Ysé Sauvage	English	Trois Baudets
157.	Zebda	French	Solidays
158.	Zoufris	French	Solidays
159.	Zëro	English	Petit Bain

Table A2.
Coefficient estimates (Bs) and 95% credibility intervals (95% CIs) for the cross-classified multilevel linear regression models estimating the effects of the language of the artist and the covariates on appraisal of the lyrics, unison singing and dancing, while excluding covariates

Table A1.

		isal of the yrics 95% CI	Unis B	on singing 95% CI	Da B	ancing 95% CI
Language of the artist	4.55*** 0.3**	[4.45, 4.65] [0.13, 0.47]	2.81*** 0.24	[2.56, 3.05] [-0.08, 0.57]	4.17*** -0.2	[3.99, 4.35] [-0.51, 0.11]
(-0.5 = English; +0.5 = French) Venue random intercept variance	0.02	[0, 0.08]	0.25	[0.06, 0.57]	0.04	[0, 0.17]
Artist random intercept variance	0.02	[0, 0.09]	0.48	[0.26, 0.77]	0.4	[0.18, 0.69]
Level 1 residuals	0.58	[0.49, 0.67]	1.03	[0.86, 1.22]	1.11	[0.93, 1.33]
<b>Note(s)</b> : Left reverse bracket indicates that the zero is excluded from the 95% CI; ** $p \le 0.005$ and *** $p \le 0.0005$						

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The consumption of live music

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