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What can second language acquisition research tell us about the phonics 'pillar'?

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ABSTRACT

Ofsted's (2021. Curriculum research review series: Languages (OCRR). https://www.gov.uk/government/publications/curriculum-research-review-series) sees 'phonics' as one of three key 'pillars of progression' in language learning. This paper critically examines this view, beginning with the OCRR's definition of 'phonics'. Focussing on the teaching of sound-spelling relations, the paper then compares the OCRR's claims with published research into phonics instruction in second language (L2) learning, particularly in classroom-based 'foreign language' contexts. Three key questions are addressed: (1) Is phonological decoding (the ability to convert written forms to sound) important in L2 learning? (2) Do L2 learners develop proficiency in phonological decoding in the absence of phonics instruction? (3) Is teaching L2 phonics effective in terms of developing students' phonological decoding, and what are the effects on other aspects of L2 proficiency? The evidence presented suggests that phonics is indeed an important facilitator of classroom-based L2 learning. However, it is important to note that there are some differences in the rationale for teaching phonics between L2 and L1 (first language) contexts. Further, research in foreign language phonics remains limited: a number of important questions remain to be answered, particularly concerning the most effective pedagogical approaches and how phonics should be embedded in the wider curriculum.

KEYWORDS

Second language phonics; symbol-sound correspondences; spelling-sound relations; phonological decoding

Introduction

Ofsted's (2021) Curriculum Research Review for modern languages (OCRR) sees 'phonics' as one of three key 'pillars of progression' in classroom-based second language (L2) learning[1], alongside vocabulary and grammar. In this article, I will critically examine some of Ofsted's claims in relation to phonics. Inevitably, there are drawbacks to examining one 'pillar' in isolation: language learning is a highly complex process, whose different components interact and affect one another. However, for the purposes of this paper, I hope that focussing narrowly on phonics will allow the strength of the claims made about this aspect of learning to be examined in greater depth.

Phonics has been a focus of much of my own research in modern languages classrooms in England. I have also worked with the National Centre for Excellence for Language Pedagogy (NCELP) since its inception as a Research Specialist, with a particular focus on phonics. As part of this role, I have delivered teacher CPD sessions on phonics and have contributed to the creation of phonics teaching and assessment materials.[2] My research has concluded that there is a clear

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value to the explicit teaching of phonics in modern language classrooms – at least in French. Nonetheless, my stance remains critical; the ongoing aim of my research is to gain a better understanding of L2 phonics teaching, including its potential limitations and drawbacks as well as its strengths. As this article will make clear, I agree with some, but not all, of the claims and recommendations made by the OCRR in relation to the phonics pillar.

In the remainder of the article, I will first provide a critical discussion of the term 'phonics' and its definition in the OCRR. After briefly considering the central metaphor of phonics as a 'pillar' of L2 learning, I will then discuss: (a) Ofsted's claims about phonics and the evidence behind them; (b) the importance of mastering symbol-sound correspondences (SSC) as part of the wider endeavour of language learning; (c) the extent to which L2 learners achieve mastery of SSC in the absence of explicit phonics instruction; and (d) evidence for the effectiveness of teaching phonics in L2 classrooms. I will conclude with an overview of what, in my view, current research evidence can and cannot tell us about L2 phonics teaching.

Definitions

If we are to describe something as one of three 'pillars' of language learning, then we must be clear about what that pillar actually is. However, in my view, the OCRR definition of phonics is unclear and inconsistent. Either explicitly or implicitly, it appears to be defined, in different parts of the Ofsted document, as: 'sounds' (pp. 6-7); 'the system of the sounds of a language and how these are represented in written words (or scripts other than Roman)' (p.7); 'sounds and script' (p.8); 'Clear and reliable pronunciation and the links between sounds and spelling' (p.8); and '[t]he ability to decode words (turn the written word into sounds)' (p.8). Essentially, then, 'phonics' seems to be used in one or both of two main senses: (a) what would usually be called phonology – the sound system of the language – and how those sounds are pronounced; and (b) 'phonics' in its more usual, narrower sense of 'instructional practices that emphasise how spellings are related to speech sounds in systematic ways' (Rose 2006: 94). The second sentence in the 'Phonics' section of the review also refers to '[a] strong awareness of phonology (the sounds that convey meaning, like the difference between 'back' and 'pack')' (p.8). Here, then, the term phonics seems additionally to encompass 'phonological awareness', which is 'the ability to recognize, identify, or manipulate any phonological unit within a word' (Ziegler and Goswami 2005: 4).

Faced with these differing definitions, we might expect to find the clearest articulation of what the OCRR actually means by 'phonics' when it comes to the description of how it should be assessed. In the 'Testing phonics knowledge' section, we are told that phonics should be assessed by 'both reading aloud and dictation' (p.19). This operationalisation of the construct clearly reflects the more usual sense of '[k]nowledge of the sound–spelling relations' (p.8); there is no indication of testing students' wider knowledge of the sound system of the language (phonology) other than through reading aloud and dictation, or of testing their phonological awareness. It is therefore on this narrower understanding of 'phonics' that the remainder of this article will focus.[3]

Whilst dealing with definitions, it is also important to clarify two other terminological issues which the report raises through its reference to 'systematic synthetic phonics' on page 8. First is the distinction between 'synthetic' and 'analytic' phonics. In synthetic phonics, children learn the sounds of individual letters or letter combinations in isolation, then learn to 'blend' these sounds together to make words (e.g. c – a – t → 'cat'). In analytic phonics, children analyse groups of words they have already met and spot patterns within them: for example, 'cat', 'cake' and 'cup' all start with the sound /k/, spelt with the letter <c>. A second distinction is between 'systematic' phonics – where letter-sounds are taught in a pre-planned sequence – and 'more opportunistic or sporadic attention to phonics in which the teacher must construct lessons in response to the observed needs of children' (Shanahan 2005:11).

Pillars, blocks and strands

The OCRR describes phonics as one of three 'pillars of progression' in the languages curriculum (also referred to, apparently interchangeably, as 'the building blocks of a language system'). This architectural metaphor of the pillar may be useful in conveying the importance of phonics as a support to language learning, but it also has its limitations: pillars are static, stand-alone structures, disconnected from one another. By contrast, whilst NCELP builds its curriculum around the same triad of phonics, grammar and vocabulary, it conceptualises these as 'strands' of progression which are braided together to form the overall 'rope' of 'essential language knowledge' (see Figure 1). This might be considered a more attractive metaphor for language learning, since it emphasises the interconnectedness of the different strands: they are tightly interwoven, each affecting the other; the rope can keep growing indefinitely; and the more tightly the strands are interwoven, the stronger the rope. However, there is still room for debate over how many strands make up the language rope (see Woore, Molway and Macaro, this issue), whether they have equal status, as Figure 1 implies, and whether phonics should really be one of them. It is to this last question that I will turn next.

Is phonics a pillar?

The centrality of phonics (in the sense of teaching spelling-sound links) to language learning clearly depends on the context. It is obviously possible to learn a language without any knowledge of phonics at all: this is how children acquire their first language (L1). The edifice of language – at least in its spoken form – can stand perfectly well without any need for this pillar. However, most classroom-based foreign language learners encounter the spoken and written forms of the L2 concurrently. For such learners – for reasons that I will explore below – I would argue that mastery of the language's SSC is indeed a powerful facilitator of language learning. Thus, in my view, this ability could indeed be conceptualised as a key 'pillar' or 'strand' of the languages curriculum. In turn, in languages with alphabetic writing systems, the teaching of phonics may help learners to construct this pillar more quickly and efficiently.

Note that in this formulation of the metaphor, the 'pillar' is not phonics per se, but rather, mastery of the relationship between the spoken and written forms of the language (which phonics can help learners to achieve). An advantage of this view is that the same central metaphor can apply to all languages and all writing systems, including Chinese characters and other scripts, such as Arabic or Russian. The OCRR, by contrast, struggles to cope with such languages, seeming to imply that they either lack one of its three pillars or require an additional one (see OCRR: footnotes 57 and 64). It seems unfortunate if the central metaphor underpinning the OCRR should apply only to a subset of languages – particularly given the declining uptake of some European languages in English secondary schools and the increasing popularity of other languages (Collen 2020). As noted in the OCRR (p.3), increasing numbers of students are learning Chinese, Arabic and Modern Hebrew, all of which use writing systems other than the Roman alphabet.

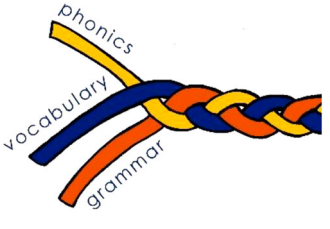

Figure 1. NCELP's conceptualisation of 'essential language knowledge', taken from Hawkes (2021): slide 22.

Rationale for teaching phonics

The OCRR makes a number of claims regarding the benefits of teaching phonics, including the following. I have also added, in square brackets, the references which Ofsted cites (via footnotes) to support these arguments.

> The following are likely to have a positive impact on pupils' self-efficacy: … knowing how to sound out words in a foreign language [Erler and Macaro, 2011]; ensuring that the building blocks of language are in place so that pupils can exercise greater autonomy. (p.5)

> To improve learners' understanding and production of language, a steady development in understanding of phonics, vocabulary, grammar and their interplay is needed. (p.7)

> We know that knowledge of sound–spelling relations is critical. (p.8)

> [T]o be better at reading comprehension, [Khalifa and Weir, 2009] learners need to become faster and more accurate at: decoding sound–symbol correspondences (how different combinations of letters map to different sounds) … This enables learners to become successful readers because it frees up their mental capacity to understand implied meanings and to process information across larger chunks of text [Field, 2013]. (p.7)

> There are similarities between learning to read and to write in our first language and learning to do so in another language. Some of the concepts that lie behind early reading and early writing (and in particular, systematic synthetic phonics) are also relevant in the languages curriculum. The step-by-step, explicit approach to phonics and spelling can transfer to the languages classroom. (p.7)

> The ability to decode words (turn the written word into sounds) also helps learners when reading texts, enhances autonomy and can improve vocabulary learning [Woore, 2014b]. (p.8)

It can be seen that generally little evidence is cited in support of the claims made. Nonetheless, as I will show below, my own reading of the research evidence tends to support Ofsted's central claims that (a) teaching phonics is valuable in modern languages; (b) learners must develop both accuracy and fluency in mapping written forms to spoken forms, and vice versa; and (c) this can be beneficial for various aspects of L2 learning, including reading comprehension, vocabulary learning, self-efficacy and learner autonomy. However, the claims about learning to read in L2 – and particularly about the similarities between this and learning to read in L1 – merit further unpacking.

Below, I summarise what I consider to be relevant research evidence concerning the rationale for teaching phonics in modern languages. Inevitably in this short article, this review of the literature is brief and selective; many of the arguments in this section are developed in greater depth in Woore (2021). However, it addresses what I think are three essential questions which must be considered when assessing the case for teaching phonics in a foreign language context. These are:

a) Is phonological decoding (the ability to convert written forms to sound) – which is the linguistic ability most directly targeted by phonics instruction – important in L2 learning?
b) Do learners develop proficiency in phonological decoding in the absence of phonics instruction?
c) Is teaching phonics effective in terms of developing students' phonological decoding (without detriment to other aspects of their L2 proficiency)?

If we can demonstrate affirmative answers to questions (a) and (c), and a negative answer to question (b), then we have a case for phonics teaching.

Is phonological decoding important in L2 learning?

In the large body of research on teaching phonics in L1, the emphasis has lain chiefly on the development of - is also essential for the development of writing, especially spelling': Rose 2006: 4). The theoretical underpinnings for phonics in early reading instruction are provided by Gough and Tunmer's (1986) 'Simple View of Reading'. This sees reading comprehension as the product of decoding on the one hand (in the early stages of reading, this means the ability to pronounce words by

sounding them out) and general linguistic comprehension on the other, often measured by a test of listening comprehension. By helping children to understand the systematic relationships between letters (or groups of letters) and their sounds, phonics teaching allows them to 'sound out' words that they have not seen before and thus 'discover' their meanings (e.g. 'C – A – T' → 'cat'). After decoding written words to sound in this way, they can then apply their existing comprehension mechanisms, just as they would to spoken language.

This process relies on the fact that children start to read in their L1 after several years of hearing and speaking the language. Thus, they already have a large bank of oral vocabulary (and morphosyntactic) knowledge, to which they have access when sounding words out. However, in modern languages classrooms, students usually encounter the written form of the L2 at the outset of the learning process, at the same time as they encounter its spoken form. Therefore, in many cases, 'L2 students cannot match a sounded-out word to a word that they know orally because they do not yet know the word orally' (Grabe and Stoller 2011: 36–37). In other words, even if a beginner learner can sound out the French word 'chat' (/ʃa/, 'cat') accurately, she may be none the wiser as to its meaning. This is one reason why, in my view, it is potentially misleading for the OCRR to highlight only 'similarities between learning to read and to write in our first language and learning to do so in another language' (and linking this in the next sentence to teaching phonics). There are also some significant differences between the development of early literacy in L1 and L2, of which the extent of prior oral language knowledge is one.

Nonetheless, I would agree with Ofsted's portrayal of the progression from novice to expert reading (OCRR: 13). In both L1 and L2, even if beginner readers can decode accurately, this process is likely to be slow and effortful initially, using up a high proportion of their working memory capacity. With practice in reading comes greater efficiency and, eventually, automaticity in lower-level processes such as decoding and word recognition. This frees up cognitive resources for 'higher level' comprehension processes (Stanovich 1980), such as making inferences and combining what they have read with their existing world knowledge. In turn, this will facilitate comprehension, including of longer texts.

Beyond reading comprehension, there is emerging evidence that mastery of L2 SSC may impact positively on various other aspects of L2 learning, such as spelling, vocabulary learning, oral communication (including listening) and motivation (Woore 2021). There is not space to explore these issues in depth here, but the common thread running through these aspects of learning is the importance of establishing tight interconnections between the written and spoken forms of words (Frost and Ziegler 2012), supporting both reading and listening comprehension. In terms of vocabulary acquisition, a learner who has mastered a language's SSC can quickly and independently generate accurate pronunciations for new words which they encounter in written form (e.g. in vocabulary lists or while reading). In this sense, the learner can be argued to have greater autonomy, because they are not reliant on the teacher or other spoken model for the new words' phonological forms. Indeed, we could say that while L2 learners are less likely to discover the *meaning* of a new word by sounding it out, conversely, they are able to 'discover' its pronunciation, provided they know the key to the orthographic code. Evidence has, in fact, been found of a link between decoding and vocabulary learning in L2 (Hamada and Koda 2008; Li 2019; Woore et al. 2018), but research in this area remains at an early stage.

Erler (2003), through her detailed analysis of Year 7 students' experiences of reading in French, suggested that mastery of SSC may also impact on grammar learning: for example, for learners who are unable to decode accurately, different tense forms such as *Je regarde* (/ʒə ʁəgaʁd/, 'I watch') and *J'ai regardé* (/ʒɛ ʁəgaʁde/, 'I watched') may sound the same. Erler went on to conclude that students who lack the foundational literacy skill of being able to decode from print to sound – yet who are expected to read and write as a core part of their modern languages curriculum – 'are bound to take offence and become disaffected learners' (Erler 2003: 308). Indeed, in a large-scale survey of Key Stage 3 students (ages 11-14) learning French in England, Erler and Macaro (2011) subsequently 'found an important link between young beginner learners' inability to decode French, their sense of self-efficacy with decoding-related tasks, and their desire to continue learning the language' for GCSE (Erler and Macaro 2011: 513).

However, even if mastery of SSC is important for L2 learning, it does not necessarily follow that teaching phonics is necessary or sufficient for learners to achieve this: on the one hand, they might be able to pick it up for themselves, without the need for explicit instruction; and on the other hand, teaching phonics may not work. It is to the first of these questions that I will turn next.

Students' outcomes without phonics teaching

A number of studies have documented L2 learners' progress in phonological decoding in the absence of explicit phonics instruction. Several such studies have direct relevance to the OCRR, because they have been conducted in modern languages classrooms in English secondary schools. These studies have found that, without explicit phonics instruction, many students of French have poor phonological decoding proficiency and make little progress in this area, even over a year or more of learning the language (Erler 2003; Erler and Macaro 2011; Woore 2009, 2011, 2014a, 2018). Similar problems have been found amongst learners of English as a foreign language (EFL), even where learners are older and more proficient in the language as a whole: for example, when university students learning English in Saudi Arabia (Alghamdi 2020) and China (Li 2019) were given decoding tests, they performed similarly to native-speaking children in the early grades of primary school.

When reading French words aloud, many modern languages students seem to rely on the 'heuristic of English' (Erler 2003:166) for their pronunciation of L2 words. This results in the anglicised pronunciations which will no doubt be familiar to modern languages teachers (e.g. *c'est intéressant*, /setẽteʁɛsã/, 'that's interesting' pronounced as /sɛst ɪntəˈɹɛsant/; 'les enfants', /lezãfã/, 'the children' pronounced as /lɛz ɪnfənts/). Ofsted is therefore right to note that '[t]here is evidence that knowledge of the first-language sound–spelling systems can be a very strong influence on learning a second system in a foreign language' (p.11). This influence of the L1 (or 'transfer' from L1) can be understood as the automatic triggering of L1-based symbol-sound correspondences by the L2 input, where the languages use the same alphabet (Koda 2007). It may also be encouraged by shared orthographic patterns across the L1 and L2, such as frequent letter combinations (e.g. '-tion' in French and English).

The symbol-sound connections of the L1 are continually reinforced through vast exposure to L1 text, both within and outside school; by comparison (especially in the context of modern languages in England), the amount of L2 input is tiny. This makes it very difficult for beginner learners to override the automatic activation of these L1-based connections; conscious attention and effort will be required to do so (Woore 2010). However, even where students are able to stop themselves reading French words as if they were English, this will not result in a correct pronunciation unless they also know and can apply the SSC of the L2. Thus, Year 7 students of French in Woore (2010) knew that the L2 words they were trying to pronounce should sound 'different from English', but 'lacked specific knowledge about what the French pronunciations of words should be' (Woore 2010: 15).

It may be noted that the above evidence all relates to L2 French or English, both languages with 'deep' orthographies (i.e. complex and inconsistent symbol-sound mappings). To my knowledge, less evidence is available on shallower orthographies such as Spanish and German (both of which are popular modern languages in the UK). However, Sparks (2015) did note that US high school students learning Spanish showed a stubborn influence of English SSC when reading aloud in the L2. Thus, it appears that even where the L2 has highly consistent SSC, this is no guarantee that these will be acquired easily by learners. I would therefore agree with the OCRR that, in respect of mastering L2 SSC, 'teachers should not leave learning to chance' (p.18).

Effectiveness of L2 phonics instruction

Despite the OCRR's very strong advocacy of phonics instruction in modern languages, there remains (to my knowledge) relatively limited research evidence for the effectiveness of such an approach *specifically* in foreign language contexts. Of particular interest are experimental or quasi-

experimental studies, which are sometimes (though not uncontroversially) seen as the 'gold standard' for evaluating educational interventions (Moore, Graham and Diamond 2003). In such studies, the outcomes of a group receiving phonics instruction are compared to those of a non-phonics control group.

In order to gain as complete a picture as possible of the evidence in this area, colleagues and I are currently working on a systematic review of experimental and quasi-experimental studies of phonics in foreign languages (Woore, Alghamdi, Li and Curle, in progress). Our preliminary scoping search of the literature published in English (up until 2020) identified only one existing systematic review relevant to our review questions. This paper, by Huo and Wang (2017), has a narrower focus, looking specifically at studies published between 2000 and 2016 and investigating the effects of 'phonological-based instruction' (including phonics) on young EFL learners in kindergarten and primary school. The 15 primary studies included in Huo and Wang's (2017) review generally found that phonological instruction was effective in developing 'reading underlying skills' (e.g. phonological decoding), with a moderate effect size; however, the effects on real word reading and reading comprehension were smaller and inconsistent. It must also be noted that only three of the studies included in the review were deemed rigorous enough to give confidence in their conclusions, and only one of these three high-quality studies (Dixon et al. 2011) focussed specifically on phonics in the sense in which we are using the term here.

Our scoping search also identified 20 primary studies of phonics in foreign language contexts, of which 11 were journal articles and 9 were dissertations or conference proceedings. These studies have investigated learners in primary schools ($N = 13$), secondary schools ($N = 5$) and universities ($N = 3$). In most cases, the L2 was English, with four studies focussing on French and one on Italian. In line with the centre of gravity of phonics research in L1 English, most of the studies have investigated reading-related outcomes. Consistently positive effects of L2 phonics teaching on L2 phonological decoding have been found, but little indication of improvement in participants' reading comprehension. This can be understood in terms of the Simple View of Reading mentioned above: even if learners can decode accurately, this will not be sufficient to allow comprehension if they do not understand the linguistic forms that they have decoded in the first place. On the other hand, there is emerging evidence (from two of the studies: Li 2019; Woore et al. 2018) that L2 phonics instruction may facilitate L2 vocabulary acquisition. However, our preliminary quality assessment of the 20 studies indicates that many are small-scale or have various methodological flaws. Clearly, more extensive, and more rigorous research is required in this area.

Confidence in the above findings from foreign language contexts is, nonetheless, strengthened by the fact that they seem to accord well with those obtained from studies of phonics instruction in 'second language' contexts (e.g. English as an additional language (EAL) students in the UK). A larger body of research has been conducted with this population of learners (particularly in anglophone countries such as the UK and US), as synthesised in reviews such as Adesope et al. (2011), August and Shanahan (2006, 2010) and Purewal (2008). These reviews have similarly concluded that phonics instruction improves second language learners' basic literacy skills but may not in itself improve reading comprehension, because gaps in their oral language proficiency will limit their comprehension.

Finally, I wish to zoom in on one recent study in particular, which is especially relevant because it was conducted in the UK modern languages context: the 'Foreign Language Education: Unlocking Reading' (FLEUR) project (Graham et al. 2020; Woore et al. 2018). This 'cluster randomised controlled trial' (RCT) is, to my knowledge, the largest-scale evaluation of phonics instruction in a foreign language context to date. Around 900 Year 7 students of French took part, clustered in 36 intact classes in schools across the country. Each class was allocated to one of three groups. All groups worked with the same set of eight specially-constructed texts, covering cultural topics which we hoped would interest the students. These texts were linguistically challenging, containing many unfamiliar words, and were considerably longer than those that students were used to. One group additionally received French phonics instruction; another received explicit instruction in

reading strategies; and the third group worked with the texts only, without any explicit phonics or strategy instruction. The interventions were implemented by the regular class teachers and took on average 10 minutes per lesson (a relatively small proportion of lesson time) over a period of 16 weeks. Although our study was framed in terms of L2 reading, we were interested in a range of other outcomes as well. At three time points – before, immediately after and six months after the intervention – we measured students' French phonological decoding, vocabulary size, reading comprehension, strategic behaviour, self-efficacy and motivation for learning the language. Students' and teachers' views on the intervention were also gathered via questionnaire and interview. Due to factors such as reorganisation of classes when they moved into Year 8, we lost many participants at time 3, so I will focus here on what we found at time points 1 and 2.

Our key findings were that (a) the phonics group made greater progress in phonological decoding than the other groups (and this difference was statistically significant after controlling for students' prior attainment); (b) all three groups made statistically significant progress in reading and all became more confident readers, with no differences between the groups; (c) there was evidence that the strategies group showed the greatest development in reading strategy use; and (d) the phonics groups made the greatest gains in vocabulary knowledge, including significantly greater gains than the texts-only group. Further, students and teachers in all three groups were highly positive about the instructional materials, particularly the challenging texts, whose cultural content they enjoyed. These texts also helped ensure that the phonics instruction was meaningfully embedded in a wider programme of literacy development. Overall, our study concluded that:

> … [a]n integrated approach to French reading instruction – combining explicit instruction in both Strategies and Phonics with the use of appropriately challenging, engaging texts – is more likely to be beneficial than any of these approaches in isolation (Woore et al. 2018: 7).

We further concluded that these approaches needed to be sustained long term. In respect of phonics in particular, we noted that '[i]t is highly likely that explicit phonics instruction is beneficial, and indeed may be necessary, for many MFL students to learn to decode in French'. However, a limitation of the study is that it did not measure other L2 outcomes such as listening comprehension or speaking skills. It would have been helpful to check that the literacy-focussed tasks which participants completed did not cause any detriment to their wider learning – although there was certainly no indication from participating teachers that this was the case.

Summary

To conclude this section, research suggests that mastery of L2 SSC is indeed important for various aspects of classroom-based foreign language learning. In L1 contexts, this issue has been seen mainly from the perspective of reading comprehension (and spelling), but in an L2, there may be an impact on various other aspects of language learning, including vocabulary acquisition.

Despite the importance of SSC mastery, a considerable body of evidence gathered in modern languages classrooms in England indicates that, on average, learners of French do not achieve such mastery in the absence of explicit instruction, even after several years of learning the language. There is less research evidence available in respect of languages other than French which have more transparent orthographies (e.g. German and Spanish). It is also important to note that the above evidence does not tell us that *no* learners of French can master the language's SSC incidentally, i.e. simply through contact with the written and spoken language; however, it does seem to indicate that *many* learners do not do so.

Finally, whilst research into the effects of teaching phonics in a foreign language remains at an early stage, the studies that have been conducted – mainly investigating L2 French and English – consistently suggest that phonics instruction can have a positive effect on L2 phonological decoding. However, unlike in L1 contexts, there is little indication of a positive effect of phonics instruction on L2 reading comprehension. These findings mirror those obtained with learners of English as a

second language (e.g. EAL students) and can be understood in terms of gaps in L2 learners' oral language knowledge. Evidence is also beginning to emerge that phonics instruction may be beneficial for foreign language vocabulary acquisition. More, larger-scale and more rigorously controlled studies are now needed, with different L2s and looking at a range of outcome measures, in order to build up a clearer picture of the effects of teaching phonics in a foreign language.

Outstanding questions

If research to date has provided some preliminary answers about teaching phonics in foreign languages, many questions remain unanswered. Key issues are how phonics should be taught, and whether the instructional model should vary according to the L2 in question.

One important question is whether 'synthetic' or 'analytic' phonics should be employed, or indeed a mixture of the two. Most of the foreign language studies mentioned above have trialled synthetic phonics programmes, perhaps influenced by trends in early literacy instruction in anglophone countries: for example, the UK government recently stipulated that all pupils should be taught 'systematic synthetic phonics as the proven best way to teach early reading' (DfE 2010: 22–23). However, this view remains contested (e.g. Wyse and Bradbury 2022). Further, there are clearly differences between young children learning to read for the first time in their L1 and older children (such as secondary school students) learning to read in an L2. The latter are cognitively more mature, already (to a greater or lesser extent) literate in their L1 and in many cases already familiar with the L2 script (e.g. the Roman alphabet). These L2 learner characteristics may make it easier for students to analyse the L2 writing system and spot patterns within it, as in an analytic phonics approach. Therefore, contrary to Ofsted's confident assertion about the transferability of 'systematic synthetic phonics' from early L1 literacy in primary schools to secondary school modern languages classrooms (OCRR: 11), it seems possible that the optimal approach(es) may differ between these contexts. There is clearly a need for further research in this area; in the meantime, my view is that teachers should keep an open mind, explore different approaches and monitor the outcomes in their own contexts.

A second question is whether phonics instruction should be systematically planned or (alternatively/additionally) delivered 'ad hoc' as and when the need arises – for example, where a teacher notices that students are mispronouncing a particular combination of letters in a text they are working on, and teaches them how it should sound. Major government-commissioned reviews of early literacy instruction conducted in anglophone countries (e.g. NICHD 2000 in the US; Rose 2006 in the UK; Rowe 2005 in Australia) concur that systematic phonics is the more effective approach; this may be because teachers who are responding to students' needs might lose track of what they have already covered and inadvertently miss out some important SSC. On the one hand, it might seem reasonable to assume that the same may hold true in foreign language contexts. On the other hand, it might also be hypothesised that students will remember an SSC better when they are taught it in response to a particular problem they are experiencing in their reading or writing (e.g. how to pronounce <äu> in German 'Mäuse').

Third, should phonics programmes be comprehensive or selective in their coverage of a language's SSC? Some studies in foreign language settings have used existing schemes designed for young L1 readers (e.g. *Read Write Inc.: Fresh Start* (Miskin 2006) in Li 2019). Other studies, such as the FLEUR project mentioned above (Woore et al. 2018), have focussed more narrowly on SSC which are known to pose challenges for students. Given the influence of L1 knowledge on decoding and spelling in an L2, it seems redundant to re-teach SSC which are the same in the two languages. For example, there is no need to teach English-literate students how to pronounce <v> or <l> in French, because they are likely to pronounce them correctly anyway. It would seem more sensible, in the limited lesson time available, to focus on those SSC which differ between the target language and L1 (e.g. vowel graphemes such as <oi> and <ée> for English learners of French). However, the precise set of SSC which should optimally be covered in foreign language phonics remains an

empirical question to be addressed. The answer will of course depend on the particular pairing of L1 and L2 in question. This raises a further issue of how to take account of any existing literacy knowledge that learners may additionally have in other languages. For example, Polish EAL students who are learning German in an English secondary school may find it helpful to note the similar pronunciation of <j> in Polish and German.

It is also important, in my view, to ask what orthographic 'grain sizes' (see Ziegler and Goswami 2005) should be used in foreign language phonics teaching. Whilst early L1 literacy instruction often targets individual graphemes and phonemes, it may be more efficient – at least in relatively 'deep' orthographies like French – to focus on larger groups of letters, such as <tion> and <ant>. This is why I prefer the more flexible term 'symbol-sound correspondences' (SSC) over the narrower 'grapheme-phoneme correspondences' (GPC).

Ultimately, perhaps the best response to the question of 'which SSC to teach' in a given L2 context will be provided by careful diagnostic assessment of learners' current knowledge, identifying those SSC which they have mastered and those requiring further work. As the OCRR advises, such assessment could be achieved through a combination of reading aloud and dictation tasks. I also agree with Ofsted's guidance that '[p]honics tests can include asking learners to spell or read out words that they have not yet been taught' (OCRR: 23) – or more precisely, words which are unfamiliar to them. This is because, in alphabetic languages, unfamiliar words force learners to engage with the individual SSC of which they are composed, rather than learners being able to recognise, pronounce and spell them as holistic, pre-stored units. For example, in Woore (2018), beginner learners pronounced familiar French words (such as 'France') more accurately than unfamiliar words with the same spelling patterns (such as 'lance'). This suggests that participants had not mastered the familiar words' individual SSC, but instead had processed them as whole orthographic units.

Fourth is a related question about the extent and form that phonics instruction should take in different languages (or in different L1-L2 combinations). We have already seen above that a crucial factor in determining which SSC are challenging for learners will depend on the relationship between the writing systems of their L1 and L2 (and any other languages in which they are literate). Further, some languages also have a larger set of SSC to learn, with more inconsistencies and complexities: these are 'deeper' orthographies such as French and, especially, English. Others are shallower, with fewer SSC to learn and fewer inconsistencies and exceptions. All things being equal (e.g. putting aside for a moment the relationship between L1 and L2), the learning burden in shallower orthographies is inherently smaller. This is reflected in the fact that young children learning to read deeper orthographies in their L1 take longer to achieve mastery than those learning shallower systems (Seymour, Aro and Erskine 2003). Accordingly, in NCELP's schemes of work, there are more SSC to cover in L2 French than Spanish, and it takes longer to introduce them.

Finally, how should phonics instruction interrelate with the wider curriculum? Research studies have found that phonics can be taught successfully in short, discrete segments of modern languages lessons, with such an approach being popular with teachers and learners (e.g. Woore 2011; Woore et al. 2018). This also matches the experiences of NCELP schools, in which (I understand from the centre directors) both students and teachers have responded positively to phonics instruction. However, whilst Woore (2011) found that teaching French phonics had a positive impact on Year 7 students' phonological decoding, the effect was only small, and it was hypothesised that this was because the students did very little reading as part of their wider curriculum. Consequently, they had limited opportunities to practise the SSC that they had been taught.

This also relates to a wider point: it is (I would argue) essential that phonics is not seen as an 'end in itself', but rather as a means to the end of meaningful, communicative engagement with the language – for example, by helping students to read and enjoy interesting texts, or helping them to express themselves in writing. This is one reason why students in the FLEUR study (Woore et al. 2018) read challenging, cultural texts as a complement to their phonics input. These texts (which, as noted above, were highly popular with students and teachers) were also constructed

to provide multiple examples of particular SSC, thus providing ample opportunities for implementing and reinforcing the rules that students had learnt previously. Crucially, the texts included numerous unfamiliar words, meaning that they could pronounce them only by applying their knowledge of French SSC (rather than recognising them as whole units). Thus, even from a phonics perspective alone, I would disagree with Ofsted's view (OCRR: 18) that teachers should 'not expose pupils to large amounts of unfamiliar language'.[4]

Conclusion

Overall, despite reservations about the OCRR's definition of phonics, and whilst I disagree with some of its specific recommendations (e.g. concerning linguistically challenging texts), I agree with a central argument of the review: namely, that explicit phonics instruction (in the sense of teaching the systematic relationships between written symbols and sounds in an alphabetic language) is likely to be beneficial for modern languages students. There are, in my view, good reasons to suppose that mastery of the L2 orthographic code is a foundation skill which facilitates many other aspects of classroom-based L2 learning. Further, the evidence suggests that many students will not achieve such mastery simply through exposure to the language, even after several years of study – at least, not in French. Finally, although the available research evidence in foreign language contexts remains limited in both quantity and quality, it appears reasonable to conclude that phonics instruction is likely to be effective in promoting students' mastery of L2 SSC. There is also emerging evidence that this may impact positively on other aspects of L2 development, including the crucial task of vocabulary acquisition. With any pedagogical intervention, one must always balance the positive effects against the time taken away from other aspects of learning, but the studies conducted to date suggest that phonics can be taught in relatively short segments and then practised throughout the rest of the curriculum, with benefit rather than detriment to wider language learning outcomes and students' motivation.

There remain a number of 'live' questions relating to foreign language phonics and it is clear that further research is urgently needed in this area. Crucially, future studies should explore the costs and benefits of different teaching approach(es), bearing in mind that these may differ according to the particular L1-L2 combination of the learners. In particular, studies are needed into the teaching of phonics in shallower orthographies such as Spanish and German.

Taking into consideration the current gaps in the literature, Table 1 below summarises my personal views on what research to date can and cannot tell us in relation to teaching phonics in a foreign language, organised into three categories: (a) conclusions about which I believe we can

Table 1. Summary of what we can conclude from foreign language phonics research.

High confidence – well established by research evidence	Likely to be the case, but further research needed	Questions – areas requiring much more empirical work
Decoding is a foundation skill in instructed, classroom-based L2 learning.	Many modern languages students of alphabetic languages other than French do not master L2 SSC without being taught this explicitly.	In modern languages lessons, is it better to teach phonics using a synthetic or analytic approach, or a mixture of the two?
Many modern languages students of French do not master L2 SSC without being taught this explicitly.	Teaching phonics in alphabetic languages other than French improves decoding accuracy.	Which symbol-sound correspondences are the most important ones to teach in a given L2, and in what order?
Teaching phonics in French helps improve decoding accuracy, on average.	Different approaches and/or less time may be needed for 'shallower' orthographies such as Spanish and German.	How can teachers best take account of any existing literacy knowledge that students may have in other (e.g. home) languages?
Fluency as well as accuracy in using L2 SSC is important.	Teaching phonics improves various aspects of L2 learning – especially vocabulary learning and motivation	
Teaching needs to provide lots of practice, including with unfamiliar words.		

feel relatively confident; (b) those which I think are likely to be the case, but require further research; and (c) things which I think are still relatively unknown.

However, whatever 'the research' may tell us, it will (in my view) always be essential for teachers to exercise their professional judgment when selecting optimal teaching approaches for their own contexts. By careful monitoring of students' outcomes – including their motivation and enjoyment – teachers can respond to the needs of their learners. Research evidence of course provides a crucial source of evidence in teachers' decision-making, but it should complement, not override, other aspects of teachers' expertise. In the words of Ellis (2005: 210), second language acquisition research can offer teachers advice:

> … so long as this advice does not masquerade as prescriptions or proscriptions (and there is always a danger that advice will be so construed) and so long as it is tentative, in the form of what Stenhouse (1975) called 'provisional specifications'.

Notes

1. The term 'L2' is used here in a broad sense to denote any additional language learnt after one's first language (L1). However, the OCRR focusses on what are sometimes termed 'foreign language' contexts. This 'refers to the learning that typically takes place in a classroom through instruction where there are no or only limited opportunities to use the second language in daily life' (Ellis 2015:18). This can be contrasted with the acquisition of a 'second language' in a narrower sense, which 'refers to the learning of another language in a context in which the language is used as a means of wider communication—for example, the learning of English in the United States or the United Kingdom' (ibid.).
2. Materials are publicly available via https://ncelp.org/.
3. Of course, the teaching of spelling-sound relations in an L2 may also help learners develop their ability to recognize and produce the L2 sounds themselves.
4. I also have other reservations about this guidance: see Woore, Molway and Macaro, this issue.

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