

The Instruments for Research into Second Languages (IRIS) Digital Repository

Jim King interviews Emma Marsden about a new online research resource

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The Instruments for Research into Second Language Learning (IRIS) <www.iris-database.org> is a new non-profit, independent, free online database of instruments for collecting data for research into foreign/second languages.

Here Jim King talks to

Emma Marsden, the IRIS Project's joint director, about her ambitious plan to make peer-reviewed L2 research tools accessible to a much wider audience. Having started her career as a foreign language teacher in schools, Emma Marsden is now a senior lecturer in second language education at the University of York, with interests in second language learning theories, foreign language teaching, and research methods. She can be contacted at <emma.marsden@york.ac.uk>.

Jim King (JK): Let's start by talking about how the IRIS project came about. Could you tell me how the repository was conceived of and why

you think there's a need for it?

Emma Marsden (EM): We learn the hard way how difficult it can be to design materials to collect data in second language research, such as getting learners to produce just the forms you want to investigate, or designing stimuli to elicit reaction times to specific language features, or producing experimental teaching materials. It's incredibly time consuming, and often we can be re-inventing the wheel. Contacting researchers who have designed data collection tools is hit and miss—academics move . . . and die, and in fact we aren't very good at curating our own research materials. I have also worked with teachers who have been doing action research. Designing the data collection tools is probably the most important aspect of research yet that is the aspect that they often don't have the time or the expertise to do. Students and early career researchers also need more support here. So those are obvious practical concerns that needed to be addressed.

JK: I know what you mean. When my own students are in the early stages of designing their research projects, I'm often asked if I can recommend any journal articles containing instruments which focus on the student's particular interest. As applied linguistics is rather atomised and has so many sub-fields, my knowledge can be stretched at times and it's a challenge to respond! Why else do you think IRIS is necessary?



EM: Another problem is that although the second language research field is relatively good at *sharing* data (we have first and second language corpora), we have a poor collective memory for how we actually *elicit* data. And how, exactly, we collect the data is absolutely critical for knowing how 'good' the research is. Yet published papers often cannot make the entire instrument available, due to their space constraints. And sound files, pictures, and videos are clearly not reproduced in journals or books. So, there was a need for more transparency, to help us to evaluate the quality of research. Methodological textbooks provide samples of some instruments but are by no means comprehensive and quickly date. Another issue is that researchers frequently call for more replication studies to be done, that is, studies that follow the same design as another, but with, say, learners of different ages or first language. Such studies are not sufficiently common. One consequence of this is that when researchers try to draw out generalisations across different studies to see the *bigger picture*, using systematic review and meta-analysis, they very often find that there aren't enough studies that are similar enough to draw any meaningful conclusions. This inhibits the impact we can have on teaching practice and education policy.

JK: Those are some very strong arguments for why a repository such as IRIS is needed. You mentioned that sometimes journals are unable to publish instruments because of space constraints. This makes me wonder whether there's a converse danger with the IRIS database that novice researchers will access instruments in a de-contextualised form without having done the necessary *hard work* of actually reading the study for which they were designed.

EM: An important issue. IRIS is using quality assurance mechanisms that are already in place: It only holds materials that have been reported in peer-reviewed published research, that is, peer-reviewed journal articles, book chapters, conference proceedings or in an approved PhD thesis. The normal criteria for assessing quality will continue to operate. For example, university tutors will have to continue to evaluate whether a student has fully engaged with their research question and data; researchers will have to continue to decide whether the materials they download are appropriate and useful for their own context; peer-reviewers have to decide whether the instrument was successful and valid. In all these cases, IRIS should make these

decisions easier and more rigorous as the whole instrument will be visible. IRIS should increase hit rates for particular articles and journals—the database will provide full reference details for the publications for which the instrument has been used. And subsequent downloaders of that instrument can then add details to IRIS of any publications that have emerged as a result of their own use or adaptation of the instrument. Also, some researchers leave detailed instructions about how to use their instrument, such as scales for attitude questionnaires. We encourage uploaders to leave the DOI (unique identifier for the publications)—this makes it easy to link to the actual article. One long term plan is to have live links to the article, though of course that will rely on users having access to the e-journals.

JK: I'm sure that the idea of IRIS helping to increase citations and article hit rates will be very appealing to both authors and journal editors, and I note that you've received letters of support from a number of the leading journals in our field.

EM: Yes, we have a really strong international support network, amongst both research and teaching associations and journals. This has allowed us to raise awareness at major international conferences, via plenary demonstrations and in conference programmes, and also in journals. Book editors are starting to suggest to their contributing authors to submit to IRIS. Several editors of major, highly cited journals have suggested that authors should be encouraged to upload their data collection instruments to IRIS so that readers can view the full instrument. We are working on developing this idea further. The principles behind IRIS will take some time to become fully established within the community, and in some cases researchers talk about their *next* project being able to offer instruments to IRIS. That is, for a few, IRIS represents a cultural change, and the idea of the final instrument(s) being fully transparent requires planning from the start of a research project. Others are immediately drawn to the idea of full transparency, to the benefits of increased visibility, and to the aspiration for their studies to generate fuller agendas with strands of (quasi-) replication studies.

JK: The repository went live in 2012 so I suppose we should still consider it to be in its infancy. What are some of the major issues you've faced during IRIS's development and what can visitors to the site expect to find there now?

EM: Yes, the database has been launched to the international community and is now fully live and searchable, with a good range of instruments already in it.

A really interesting challenge we have had is developing our cataloguing system, that is, how each instrument is *labelled* so that it is searchable along a range of parameters. This has involved taking stock of the breadth of the L2 research field. IRIS will host the full gamut of theoretical and methodological perspectives, research areas and instrument types, ranging from artificial word lists and psycholinguistic experimental scripts to interview protocols and observation schedules. Clearly, the job of classifying and cataloguing will never be done! On uploading instruments, researchers are encouraged to use the terms we have provided to catalogue their research area, instrument type, proficiency level, and so on, but we also allow the community to suggest new labels, and so the system will grow with our field. Our advisory board also helps us to evaluate the design and content. To date, the range of materials held includes experimental teaching materials, working memory tests, pictures used to stimulate oral production, gap fill tasks, questionnaires to elicit strategy use and motivation, sound files for investigating listening. A range of target languages and proficiency levels are represented, and we want to encourage this variety a great deal more.

JK: I can attest to how easy it is to submit an instrument to IRIS. I recently uploaded my own interview protocol (King, in press) which is designed to explore the beliefs about silence and attitudes towards oral participation of Japanese learners of English. The whole process was very straightforward. I'm also planning to submit a structured observation scheme, called the COPS (Classroom Oral Participation Scheme; see King, 2012), which I used in a large-scale, multi-site study within Japan's university system. Does IRIS contain any other instruments which might be of particular interest to JALT members or to others conducting L2 research in Japan?

EM: I'm pleased to say that even though IRIS was launched only relatively recently, if you enter the search term 'Japanese', the search finds several instruments already. You can then filter your search by, for example, 'First Language of Learner' and you will find a number of data collection tools that have been used with Japanese L1 learners. On the other hand,

you could filter by *Language Being Learned* and you will find instruments that have been used with learners of Japanese as an L2. Each search result provides references to published articles, so in the case of Japanese as an L2, these include a stimulated recall by Egi (2010), a self-efficacy questionnaire by Kato (2009), a word list for investigating phonology by Taylor (2012), and an information gap task by Tarone (in press). For research with Japanese learners of other languages, there is a speaking test by Gilmore (2011), a discourse completion task by Takimoto (2009), a learner strategy questionnaire by Mizumoto and Takeuchi (2009), a decision-making oral task by Révész (2011), a listening test by Brannen (2011), and an information gap task by Mackey (1999).

We hope to get many more instruments that are written in languages other than English. At the moment, there are three written in Japanese, with yours being one of them—I found this out by filtering my search by *Language in which any Instructions are Written!* However, I'd like to stress that one of the ideas behind IRIS is that tools that have been used with, say, L1 Chinese learners will be downloaded and then used with, say, L1 Japanese learners, and the results compared. Or, instruments that have been used to elicit data from learners of L2 French will then be adapted to be used with learners of L2 Japanese. IRIS should facilitate cross-linguistic comparisons, and improve our understanding of the validity and generalisability of data collected with particular tools.

JK: Let's turn our attention to your own research. I see that you're setting a good example where IRIS submissions are concerned, being the author or co-author of over 20 instruments which appear in the repository. What current research projects that you're working on particularly excite you and will they produce any new submissions for IRIS?

EM: Nurturing IRIS is quite exciting and demanding (!) at the moment, involving the conceptualisation of a large field of work, developing an adequate cataloguing system, promoting uploads, and envisaging the requirements of established and novice researchers. But yes, I hope to upload more materials soon. One study I have just worked on with John Williams (Cambridge) was a psycholinguistic laboratory experiment. We found that after very little exposure to a small artificial language, adults can pick up, without awareness, the form and meaning of suffixes, though these suffixes

do not seem to be encoded both phonologically and orthographically (Marsden, Williams, & Liu, in press). From this, we will upload the training materials including sound and picture files, the lexical decision priming test, and the E Prime software scripts. Another, quite different project was with Florentina Taylor (York), which investigated whether we could influence 14 year olds to continue studying a modern foreign language at school. Once published, we will upload a range of materials: the prompts for the external speakers (e.g., a sports journalist, a musician) that probed the relevance of languages to their lives, and the questionnaires and focus group protocols used to elicit students' attitudes to lessons and to our intervention. These might be useful for practising teachers, as well as researchers, who wish to undertake a similar project. Finally, with Leah Roberts (York), I'm part of a large team of European researchers who are studying the role of input and individual differences (e.g., working memory, language sensitivity) in the initial stages of learning a new language, Polish. Once published, I hope the cognitive measures, language tests, and teaching intervention will be visible and searchable on IRIS.

JK: Finally, I believe you're also organising an upcoming conference which focuses exclusively on the issue of L2 data elicitation.

EM: Yes, the IRIS project is hosting a conference in York, *Innovation and challenge in eliciting data for L2 research*, on September 3–4, 2013. The conference is a series of invited presentations from established investigators on diverse areas of L2 research, including eliciting data on identity, online processing, language knowledge, working memory, priming, and oral interaction. The IRIS team looks forward to seeing you there!

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