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Interview

Across Disciplines, Languages, and Cultures: An Interview with Marina Dodigovic

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Abstract
Marking the twentieth anniversary of her groundbreaking book on AI in second language learning, professor Dodigovic answers several pertinent questions at length. The questions address the origin of her interest in language learning technology, in addition to the challenges she experienced during her early career. In addition to explaining her interest in vocabulary, she shares her multicultural experiences along the path her career has taken her and discusses her current projects. Finally, she shares some career advice for new and future researchers, whom she is known to wholeheartedly support.

Keywords
Artificial intelligence, computer assisted language learning, vocabulary, ESL Book Clubs

Marina Dodigovic, PhD, is a professor of English at the University of Slavonski Brod, Croatia, and an honorary affiliate of the University of Adelaide, Australia. She is the author of the first book on AI in second language learning (Dodigovic, 2005), published by Multilingual Matters. In addition to this, and many other technology-related topics, professor Dodigovic has more recently conducted research in vocabulary learning. She has taught in MA TESOL programs internationally, guest-edited special issues of journals, and published several books and peer-reviewed journal articles, including the co-edited volume *Vocabulary in Curriculum Planning*. In the last few years, she has also delivered several plenary talks and keynote addresses at applied linguistic conferences. Her current interests include vocabulary growth in English as an additional language and English as a Second Language (ESL) book clubs as a vehicle of achieving this.

This is the twentieth anniversary of your book on AI in second language learning. It is my understanding that this was the first book on the topic to be published, and if I may add, considerably ahead of its time. How did you come up with the idea to write this book?

So, 20 years back, Multilingual Matters published my book titled *Artificial Intelligence in Second Language Learning*. This indeed, as you say, was the first book on the topic ever published. And it's a very pertinent question to ask how the idea came about. Now, this was not the only book being written on the topic. Another pair of authors were preparing their book on a similar topic. However, unfortunately, their publisher was a little bit slower. So, it was my book that came out first. Thus, I was fortunate in a sense. But for sure, there were not too many people who were concerning themselves with the topic at the time.

One of the people that has greatly impacted me in this respect was the nowadays little-known researcher, professor, philosopher and, in one word, a genius, Frank Borchardt, who very unfortunately passed away in 2007. He was a professor of German, ironically, of German literature, holding a professorship at the Ivy League Duke University in the United States.

He became interested in Computer Assisted Language Learning (CALL), and it soon became his passion, to the extent that, as he often joked, it ruined his perfectly mapped out academic career in German literature. He was especially keen to see the birth and proliferation of natural communication with computers. He was also lobbying for the uses of artificial intelligence in CALL, as well as for producing what is called *killer apps* in CALL. Now, killer apps are those applications that drive the sale of the platform they are designed for, just like the VisiCac program that drove the sales of Apple II, or the Mosaic browser, which pushed up the subscriptions to the Internet.

All that really inspired me. Frank Borchardt was very disillusioned with the CALL programs at the time (Borchardt, 1999), i.e., in the early and mid-90s, and rightly so. Because they were no more than what was dubbed in the past “a page turner” or “candy machine”. Now, that goes back to the very early, pre-computer Learning Machine, which was automated and based on the principle of programmed learning. It would have the learners read a little bit of text, give them measured information on a topic, even turn pages for them, and then check back the learners’ knowledge and understanding. And the learner could demonstrate that knowledge and understanding by choosing the right answer. There would be a multiple-choice question, of course, with a very limited number of choices. An answer to the question was supplied by pressing a button and then, if the answer was correct, a drawer would open and a piece of candy would come out.

That was very much the situation with the early CALL programs. There were a lot of drill-and-practice exercises, so that some people called that “drill-and-kill”. For this reason, Frank Borchardt and I thought that in this situation, artificial intelligence would come to the rescue. I did my best to make this come true while doing my PhD on CALL in Germany. I was very fortunate that my supervisor was also a computational linguist, which is why I attended many of his lectures on Natural Language Processing (NLP) and was trying, desperately trying, to understand the different approaches to parsing as well as a variety of existing parsers. However, that proved an onerous task because the matter was very abstract. We didn't actually have these parsers in an electronic format, only their outlines on paper, which made them less easy to understand.

It all changed when the university acquired an AI programming language, called *Prolog*, short for Programming in Logic, which was ideally suited for parsing. It was as if it was specifically made for linguists, designed to be able to handle all sorts of language rules, deal with both grammar and vocabulary, and that was really wonderful. Moreover, rather than leaving it all up in the air and very abstract, the university offered a practical tutorial on programming in

Prolog, and for me that was really the turning point, when I started applying Artificial Intelligence to create my own programs. And, finally, I arrived at a solution as a spin-off from several different projects, all involving *Prolog*.

That particular program was specifically designed to deal with learner errors, semipredictable kinds of language errors made by Southeast Asian students of English (Dodigovic, 2013a). So that was what became the core of the book. And, in a nutshell, this is how the book came about. It was a process, though. First, I wrote several articles about the program. There seemed to be a lot of interest in the topic at the time. I presented at conferences and afterwards was getting invited to publish on the topic in prestigious academic journals. At one of the conferences, I met a representative of Multilingual Matters and asked him whether they would be interested in publishing a book to the topic. And they were. Especially the series editor at the time was very enthusiastic about the subject, and the rest is history.

What were some of the challenges you faced as a pioneer and early adapter of educational technologies?

Please allow me to refer back to Frank Borchardt, who claimed that developing an interest in CALL had ruined his perfectly good academic career as a professor of German literature. My experience was in many ways similar. I also started with a keen interest in literature, but since this career didn't offer any promise of employability, I turned to my second love, which was language teaching. Even that was out of reach for a while, so I had to work very hard to transition from an initial career path of translation and interpreting into teaching.

While I was working as a translator and interpreter at the Institute of Mechanical Engineering, which was connected to the Faculty of Mechanical Engineering at the University of Osijek, and trying to convince the powers that be to let me teach English for Engineers, the Institute received its first PCs. I was instantly attracted to those, and because I was surrounded by a group of young engineers, equally keen to learn, and I soon began to learn how to develop software. Many people at the time were saying that programming would be too difficult for me because I didn’t have a background in engineering. This could have been discouraging, but I just thought to myself that a programming language was just another language, and I was actually good at learning languages.

At the same time, I was finally offered the teaching position that I was dreaming about. Noticing that my students had trouble understanding the concept of the passive voice, which does not exist in their native language, I thought that as future engineers, they might find it easier to relate to computers then to human teachers, and so I developed my first CALL program dealing with the passive voice. This was an instant success with the students, who thereafter actually started using the passive voice spontaneously. However, it brought me the grudge of the people who “owned” the PC Lab, which had real repercussions for my future at the institution.

This was followed by multiple rejections of my PhD proposal on the topic of CALL. It was happening at a time when interdisciplinarity was not really encouraged. Thus, the linguists were saying: “We don’t want to have anything to do with computers”, while the computer specialists were saying: “We don’t want to have anything to do with natural language”. Fortunately, during a study period in Germany, I was able to find a computational linguist who accepted to be my PhD supervisor.

Getting a PhD in CALL was only half of the solution. The other half was finding a suitable job. While that was eventually found in Australia, continuing to pursue my interest in CALL was not as easy as one might think. True, research grants for this were available, and publications followed, but the promotion, retention, and tenure committees did not really value such research. In fact, one of my reviewers noted as a negative that I "only did research in CALL".

For this reason, once again, I thought it best to move to Dubai, where being acquainted with computers and knowing how to use them in teaching was actually a skill in high demand. However, what was required was more of a practical skill, not so much the ability to do good research in the area of CALL. This forced me to slow down, re-group and think of a project where I could capitalise on the bulk of the research I had already done, and along came the opportunity to publish my book on AI.

How did you develop an interest in vocabulary?
Back in Dubai, one of my colleagues was David Palfreyman, who was interested in vocabulary, and I believe was even doing a PhD on the topic. Through his professional development workshops and some other activities, I was able to learn a little bit about vocabulary research and its tools. It seemed like an area that intersected with every aspect of language teaching and learning, including technology and assessment. Naturally, that made it very interesting to me. This interest intensified when I was able to attend a guest presentation by Keith False (2004) about his book *Vocabulary Myths*. The presentation, and later the book itself, really resonated with me, especially the part where the author debunks the myth that vocabulary would take care of itself. At the time, I'd already been a bit sceptical regarding some of the bold claims of communicative language learning, including its somewhat relaxed attitude to vocabulary.

On the other hand, vocabulary research and its conclusions had great explanatory power. It explained very well why many language students were failing to learn a target language, despite regular teaching and learning activities. Most such students that I later tested myself were not proficient in the first thousand (K1) of the most common English words. This was frequently the case because the teaching materials they had to use were introducing them to much less frequent words, which they were not yet ready to acquire because they hadn't yet mastered the most useful ones. For this reason, they never made progress with their receptive skills, reading and listening, which very much depend on the vocabulary size of the reader/listener.

Another exciting thing about the research on scaffolding vocabulary learning was that it quantified Krashen's (1989) i+1, namely, the requirement that input be slightly above the learner's own level. Translated to the vocabulary unknown to the learner within a text, that number is roughly 2-5% of the text's vocabulary, because research by Nation and others has demonstrated that a text can only be understood if 95-98% (Nation, 2001; 2013; 2022) of its vocabulary is familiar to the reader. An excellent way to scaffold vocabulary learning was to use the so-called graded readers (Dodigovic, 2023), whose vocabulary level is adjusted to the reader. Because of the initial use of simplified and abbreviated classics for this purpose, graded readers were brought into disrepute by the proponents of authentic reading materials. However, the influential linguist Henry Widdowson (1973) pointed out that what is needed is an authentic reading experience, i.e., similar to that enjoyed by a native speaker reading a text in their own language.

Finally, vocabulary tests were the icing on the cake. They are so practicable, easy to administer, and easy to take. They are also very accurate, usually correlating well with the more complex and much more time-consuming standardised language proficiency tests. Moreover, they can

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be used for a variety of purposes, including language proficiency, placement, diagnostic, and summative testing.

For all these reasons, vocabulary is a gift that just keeps giving. It can be used for high-end research, but it is also very practical, in that it can be applied in needs analysis and used to shape the language curriculum. For people who enjoy using technology, online resources like Tom Cobb's Compleat Lexical Tutor (www.lextutor.ca) are just invaluable. In fact, it is hard to do anything connected to vocabulary without technology. In summary, this is how and why I got interested in vocabulary.

You have also lived and taught in a number of cultural settings, including Europe, Australia, the Middle and Far East, as well as Eurasia. What prompted you to embark on such a diverse career-path?

To start with, my grandfather, whom I grew up with, was a traveller. His stories about distant worlds were amazing and instilled in me the wish to push off some day and embark on my own travel adventures. The real inspiration and direction, however, came when I read or, rather was read, an abbreviated version of Marco Polo's memoirs. Much later in life, I realised that my trajectory had taken me almost exactly down the route that Marco Polo travelled: from southern Europe to the Levant, via Arabia, and then following the Silk Road, to China. It didn't happen exactly in that order. First, I left my native Croatia to study in Germany, from where I migrated to Australia, as explained in some of my previous answers.

Australia had always been a country I felt a deep connection to, having grown up watching a number of Australian series, including the classic, Skippy, about a cute and smart kangaroo. Indeed, this show was my first exposure to the idea of learning technology, as the family involved in Skippy's adventures lived on a station, far away from the nearest town, so the children were schooled via interactive radio. I found that idea to be truly revolutionary. Moreover, many of the people from my home town had moved to Australia, and I'd only ever heard good reports from them. In the course of my life, I also met some Aus-born Aussies, and I found them very easy to relate to. During my studies in Bremen, I found that many younger Germans dreamt of migrating to Australia. All of the above set the stage for this trans-continental move.

Fast forward to the year 2000, which was fraught with many fears and uncertainties, starting with the Y2K bug and an economic downturn. In this climate, many Australian universities responded by closing down the departments in the humanities and social sciences, which were not seen as particularly economically viable. Fearing that the same fate might befall the department I was a part of, I stretched out my feelers, and a year later, I received a surprise interview invitation from Dubai. At that time, hardly any Australians knew where Dubai was, but the fact that it was on the Arabian Peninsula, really clicked with me, because this was what Marco Polo would have done. You must understand that as an ethnic Croatian, I firmly believe that Marco Polo was a Croat himself. In fact, Venice was the administrative unit for his native island of Korčula, where the house of his birth still stands.

After nine wonderful years in Arabia, I moved to Lebanon, in the Levant, the first point of departure toward the silk road by European traders in the past. Although many people I met were wonderful, there were considerable economic and logistical challenges to living in Lebanon.

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At the same time, I had this suppressed dream that someday I would go and live in China. After visiting Chengdu for a conference, I started proactively looking for work there, and was soon offered a position at a prestigious Cino-British university in Eastern China. These were some of the most productive and enjoyable years of my life. However, in this period, my mother's health deteriorated, which is why I needed to be geographically closer to her, that is to Europe. Again, a conference acted as a catalyst for my transfer to Armenia, which is much closer to Croatia than China is.

I am currently very fortunate to juggle between the University of Slavonski Brod, located in my hometown in Croatia and the University of Adelaide, here in my current Australian hometown, which has earned many wonderful titles over the years, some of which are Australia's most liveable city, the most beautiful city in the world 2024, and currently, the happiest city in the world.

Could you share some of your most significant experiences from those regions?
I often get asked which place is my favourite place, and my answer is always the same: each country has its own beauty and its own special advantages. For example, what I really liked about Germany, especially in the area of academic work, was the fact that there were many programs, support programs available to junior academics. I was also able to find people who believed in me and supported me wholeheartedly, which is how I learned to be the kind of support that junior academics need.

What I like about Australia is the fact that it's an open immigration country, that it has a great track record of treating its newcomers well, and that, at least back in the day, it was very easy to integrate into Australian academia. Unlike many European countries at the time, there were no bureaucratic impediments to newcomers seeking to continue their academic careers: no red tape, no citizenship requirement for lecturers or professors, no ratification of academic credentials by the government authorities. Added to that is the fact that Aussies are a friendly lot, open to embracing people from different cultural backgrounds.

The Arabian Gulf really surprised me with its modernity, advanced technology, and wise planning for a future without oil. Its people also defy stereotypes, especially regarding gender roles. The young women of Dubai, whom I was privileged to teach, were very powerful figures, far from the demure stereotype that we ascribe to them. They were outspoken and articulate, well versed in getting their voice heard. Moreover, at the time, the region hosted some of the strongest English teachers' associations, which created opportunities to both learn about and present new insights.

One of the many amazing moments that I will never forget is the time when my students organised a surprise birthday party for me in an unused classroom. This was one of the best birthday parties I have ever had. Something similar happened years later in Armenia, except that the students brought the party to a scheduled class. Yet it was a wonderful thing to do.

China turned out to be everything I hoped it would be and much more than that. Never have I had such diligent students before, or so respectful. Like the majority of the Chinese people, they had a good attitude and an even better sense of humour. In China, I learned that language is not essential to human communication, but I felt inspired to learn Chinese anyway. I enrolled in classes and was rewarded for my efforts in everyday situations, as the locals really truly appreciated them. I especially enjoyed the traditional group activities, such as *taiji*. One thing that needs to be said is that China's landscapes are stunningly beautiful. I enjoyed traveling

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through and sightseeing in China whenever I could. In my last year in China, I was in a bit of a rush to see as much as possible, and so I embarked on the trip to Huangshan, the Yellow Mountain, which was celebrated for its beauty by classical Chinese poets. Even though I was by myself, I never felt alone. All the time, hiking up the mountain, I would engage in friendly banter with groups of Chinese tourists, and it was amazing how easy that was.

In Armenia, another beautiful country, I met some of my most inspired students, the ones who really stood out amongst the many generations and populations of students I had taught. The same goes for the Armenian people in general. Some remarkable things happened to me in Yerevan, of which I'll single out two. The first one was when during a particularly long and harsh winter, the streets of Yerevan were under ice, and difficult to navigate. Seeing my insecurity on ice, two little boys, hardly older than 9 or 10, offered to help me over the ice patch, and in fact did that very well. The other one is when I needed a very small battery for my e-pen, which the shops in my neighbourhood didn't have. I sent an email to the colleagues who could have known where to get one, and promptly one of them got her brother to actually buy me one! And she hardly knew me!

Even though I had moved to Croatia to spend my mum's last year of life with her during Covid, most of my online groups were based in Yerevan, and some remarkable projects got off the ground that way.

However, the experience of being semi-retired in the beautiful, and yet quiet city of Adelaide is one I still need to get used to.

What are you working on currently?

I am currently working on a book about ESL book clubs for Multilingual Matters. The objective of this book is to train ESL teachers and others in the art of designing and running clubs. The main issue about organising and running ESL book clubs is making sound lexical choices. I have written about this briefly (Dodigovic, 2014). Whether it is to be a stand-alone activity, an extracurricular school activity, or an activity outside the school system, an ESL book club should be guided by two main ideas, namely, extensive reading and lexical accessibility of the readings. By extensive reading I mean the kind of reading that happens for fun or in search of information, rather than for the purpose of learning how to read. The adjective extensive, of course, points to the length of text, which should enable the repetition and recycling of adequate vocabulary.

Now, we know that in order to understand a text, the reader needs to understand roughly 95% (Nation, 2001; 2013; 2022) of its vocabulary. Therefore, two things should happen before a book is assigned. Firstly, the participant's vocabulary should be pre-tested, and the reading carefully selected to match that profile. The latter is best achieved using graded readers (Dodigovic, 2023). They are not just abbreviations of classics, which used to upset the authenticity proponents. More recently, there have been many thrilling short novels, specifically written for various language proficiency levels. I enjoy reading them myself and can highly recommend them.

On top of having found the right level and selected the right reading, this approach also requires a structured approach to group meetings, including the right type of activities. I have briefly touched on this before (Dodigovic, 2014; Dodigovic, 2018), but the book will deliver the detail, as well as many possible variations. This is not just to reinforce the four skills, but written homework, especially, becomes a major tool in the battle against plagiarism (Dodigovic,

2013b), while the bulk of the activities also leads to improvements in grammar (Dodigovic et al., 2014).

It is surprising that, given just how much has been written about each of these subjects, ESL book clubs are not really seen as an extension of the lexical approach, nor have they taken off on a massive scale. It could well be that in this day and age extensive reading is an anachronism. However, I hold on to hope, seeing how much my students enjoy reading these books, but we need more teachers or other facilitators to step in and fill the gap. This book is intended to get potential facilitators at least curious enough to read it and undergo the training found in its pages.

You are also known for mentoring junior academics. How did you decide to step into this role?

It is quite natural to develop rapport and a personal relationship with your students, especially those whose theses you supervise. But also, I know from experience how tough it is trying to get a breakthrough in academia. This is best epitomised in something our dean at Cornell University once said to us, the academics he chaired. He said: "You are among the 1-2% of most competitive people in the world. That is the overall number of people with a PhD". Later on, I found out that of those 1-2% of people with a PhD, only 10-30% make teaching at university a successful career. According to this, less than 1% end up in academic jobs.

On a more visceral level, it is a career path riddled with hard work, rejection, and what sometimes seems to be unfair competition. The academics of today are faced by a barrage of negative feedback, what from students and supervisors, and what from reviewers and editors of academic publications. I remember the absurdity of having worked on a paper through several cycles and always being told that it's missing important references. I kept adding them, only to receive the final verdict, which read roughly like this: "Rejected. It's a good paper, but it has too many references".

On the other hand, in the course of my career, I have also received a lot of help in unexpected places, and deep down, I didn't always feel worthy of it. However, this taught me both about the importance of humility and the vital role that we as academics are called to play – namely that of paying it forward, helping our younger colleagues, and showing them that each of us can choose to make the world a better place for others.

Because of this, I admit, I take an interest, especially, in my former students and their careers. I also try to provide them with opportunities to publish in a safe environment, while at the same time rubbing shoulders with seasoned academics. Nothing gives me more joy than seeing the young people I mentor grow from strength to strength.

What would be your advice to young researchers seeking entry into an academic career?

When I was a junior academic, there were fairly straightforward rules about how you progressed in the profession. You had to achieve a particular number of publications and a particular type of those in order to be promoted to the next level. Attaining a senior position like an associate professor or professor often entailed publishing a book or two and doing things like organising conferences, chairing committees and otherwise maintaining a high profile.

Things became less clear when journals started being ranked. All of a sudden there was a push to publish in high-ranking journals and bottlenecks were created. Some of these journals had to reject over 90% of all submissions, and as a junior academic you had to find out where you

had a chance, that is to say which journal rejected less than 90% of all submissions. We have since come away from that. Sadly, however, a number of junior academics is still told, or are led to believe, that they should be publishing in those journals in order to succeed. This advice really defies common sense because if you're a junior academic, you don't have the research level or the writing skills to succeed in this relentless competition.

Meanwhile, the rules of the game have changed, partly due to the fact that there are open access journals and that many grant agencies insist that the research sponsored by them be published in such journals. While some of these publications require the author to bear the publication cost, others are free to both the authors and the readers. Among those, one needs to choose wisely and try to pick out the ones that are likely to reach and impact the broadest audience. It is always good to do a simple Google search to find out whether an open access journal is predatory, especially if payment is required from authors.

Unfortunately, bibliometrics are here to stay, although they make it all a bit of a numbers game, in my opinion, as they try to quantify the unquantifiable, and express quality in terms of quantity. Under those circumstances, it is worth remembering that the number that counts most is the number of an author's citations in the work of others. While in the past this may have been achieved by publishing in high-ranking journals, nowadays, it is important that your work can be found online, whether in open access journals or on websites such as ResearchGate. I have recently realised that by sharing more of my publications on ResearchGate, my indices shot up within weeks or days. That's why I recommend that you share your publications even before anyone asks for them, but especially if they request access. However, first check if there are any copyright issues that would prevent you from doing so.

Also, those who join supportive teams, associated with journals and are prepared to serve the journal in some capacity, and commensurate with the career point that they find themselves at, have a very good chance of succeeding.

Applying for grants as a team effort is another key factor, regardless of how prestigious or humble the grant itself is. It is the team work on the project that yields publishable research. For this reason, I can say that the time of lone giants has passed. It takes a village to raise a child, and a team, or several teams, to birth a seasoned academic.

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