

Some Words from the (main) Translator

Phewwww ...!!! What a labor of love this has been! Four years in part dominated by trying to find the right words and expressions ... not just technical jargon, not just precise scientific equivalences, but also doing justice to the sometimes highly personal style of the author ...

Here's how this translation of the German "Physik der Elektrogitarre" into the English "Physics of the Electric Guitar" came about. There's quite a bit of back-story:

From a very early age my life has been connected to science, electrical engineering, and electro- and psychoacoustics - and to music. My grandfather was a violinist with a permanent position in the orchestra of the opera in Stuttgart, Germany. My dad, Eberhard Zwicker, was a high-calibre scientist: an electrical engineer and electro-acoustician by trade who had specialized in Psychoacoustics. As one element in a group of scientists around the globe who investigated the fundamentals of the hearing system, his findings – together with those of others – laid the groundwork for many practical applications. Examples are diagnostic systems to check the hearing system of newborn and very young children, or the development of systems that could measure the actual loudness of sounds as it is perceived by us. Not least, the development of the data-compression algorithms behind the now ubiquitous mp3-music-format is another result of that psychoacoustical research.

I had been playing the guitar for a couple of years when I first met Manfred Zollner in the mid 1970's at a family-party of the members of my dad's team of scientists who worked with him at his lab at the Technical University in Munich. Manfred had just gotten his diploma in electrical engineering and was starting in a position as an assistant professor at the lab, also working on his PhD – but what fascinated me much more was the Gibson ES-335 he had brought along to the party ... an instrument that I had been dreaming of! What Manfred had with him also was a little battery-powered amp that he had modded to achieve controllable, smooth distortion. With his playing being light-years ahead of mine at the time, the sound he got that night at the campfire was terrific, and I of course clobbered him completely with lots of questions about guitars and amps. He seemed to know everything, and that he worked on the side as a techie at the music shop my friends and I frequented only added to my fascination. Clearly, the man was brilliant in a number of ways - and he was also quite a character.

Over the years, I could stay in touch with Manfred. As can be seen in his introduction on the "Board of GITEC"-page (<https://www.gitec-forum-eng.de/landing-page-news/vorstand/>) his path led him (after obtaining his PhD) first to the music equipment industry, and then to his own company developing and manufacturing precision instrumentation of acoustical measurements. Subsequently, he held a university professors chair for many years until his retirement. I retired myself in early 2016, and around that time the contact to Manfred intensified again - because he had founded GITEC, and I was of course EXTREMELY interested. I had the privilege of being invited to join the GITEC board in late 2015 (where I served until late 2019).

Manfred had published his book "Physik der Elektrogitarre" in 2014, and it was clear to me that this was – in its approach, depth, and style – a most unique, unparalleled oeuvre ... that merited the largest possible readership. The latter, however, would remain rather limited because of the use of the German language. In a number of board meetings, I urgently pushed the idea that it was necessary to offer global access to the book by translating it into English.

The board completely agreed. We were acutely aware, though, that there were serious challenges. Manfred had in fact already earlier investigated possibilities - and while there seemed to be some people around that could do the job, the cost seemed prohibitive in view of the finances available to GITEC. Because we still wanted to push the issue, we decided to jointly put some private money on the table - and started negotiations with translators.

At the same time I started the project of introducing an English version of the GITEC website. In the corresponding framework, I started to translate some of the articles that had been published on the German-language GITEC-site. After all: despite not being a native English (or American) speaker, I had lived in the US for a number of years, I had worked at the European Patent Office (where English is one of the three official languages) for the better part of my professional life, and I had good technical insight – so I felt competent to do that kind of work. However, from the book translation I did shy away ... simply because of the sheer amount of word involved in that task.

Over the course of half a year we checked out some translators who seemed able to work on the book but found the results of some test translations not satisfactorily at all. Moreover, most of the translators we contacted showed merely a lackluster interest ... simply because a volume of around 1300 pages of material that combines extremely serious science, pronounced specialization in music-equipment, quite specific satire and not infrequent acidic comments is not what's included in the business model of your regular translator. In mid 2016, we were quite frustrated ... and I decided to do what I had sought to avoid before: offer myself as a translator. Putting the articles into English had proven to be a very enjoyable experience that also helped me keep my command of the language at a good level. So maybe a VERY long-term project of translating the book would not be impossible for me. On top of that, I had some insights into the kind of character the author was, and I felt I could find the right kind of style that would represent him well.

My good pal and (at the time) co-board-member **Wolfgang Hönlein** was sufficiently encouraged by my willingness to start actual work on the project to indicate that, with the assistance of a British friend of his, he would contribute. We also considered that we could invite other contributors to possibly form a kind of "cloud-translation" project that I could "oversee".

There was indeed much enthusiasm among a number of people who heard about the translation project - however, none of them had really much (or any) experience with translation work. Some of the folks tried out what it was like ... but realized very quickly that this required too much of an effort, or that their skills were not at the level required. On the other hand, it also became clear to me that coordinating and checking the results of a "crowd-translation" project would not be much less work than doing the translation myself. In the context of the crowd-translation experiment, I am indebted to **Franz Wolter** for his considerable efforts trying to make a contribution.

In the end, Wolfgang (with the help of his friend **Andrew Graham**) did supply the translation of the whole Chapter 4, and GITEC-friend **Volker Eichhorst** (with help of his friend **Gabriel Mallory**) saw to it that sub-Chapter 7.7 and the Supplement got translated. As a "collateral benefit" from trying out translating, **Ralf Jamer** helped with translating the article "Overdrive, Fuzz & Distortion" in the GITEC website's knowledge-base.

The rest ... that was up to me to take care of, and although I am almost ecstatic to be able to state now (in autumn 2020) that the translation work is completed, I am quite sure that I will miss the work in a way. I have learned – in more ways than one! – a lot in the framework of doing the translation, and it certainly was much fun. For better or worse, GITEC has generated a lot of material on top of the book (and keeps doing so), so that I have an ample supply of text in case there are any severe withdrawal symptoms ... after all this time of dedication to pushing "Physik der Elektrogitarre" into the English-language realm.

Here, I would like to thank all those who have supported me in this endeavor

- first and foremost the **Professor M.Z.** himself: he read all the translated material with great patience, and with the precision that distinguishes all his work, and gave important feedback.
- **Wolfgang Hönlein** for continued encouragement, discussions, and input, and his wife **Brigitte** for a never-ending supply of "tea and sympathy" (or, rather, coffee and biscuits, and lunches!) during these discussions,
- the board and the consulting friends of GITEC,
- the special support, interest, feedback, and encouragement of
 - **Andrew Flanders** in the US,
 - **Tim Wrigley** in Australia
 - **Doug and Robbie Laughlen** in the UK
- **Bertrand Dauvergne** for much encouragement and helping me with the "rather different" Chapter 0 (on top of being a great musical collaborator!).
- **Elizabeth Corcos** for constant encouragement and support, and for helping me to maintain a good level of (spoken) English,
- last but absolutely not least my lovely **Sabine** (who must have anticipated my retirement with rather different expectations about my activities) for the always patient and loving support.

I hope many readers get something out of this translation.

Be well and take care - live long and prosper,

Tilman