



IMMERSIVE EXPERIENCES,
DEEP THINKING, AND NAKED TRUTHS
PETER KELLER

Peter Keller holds degrees in Music and Psychology from the University of New South Wales in Australia. He is currently Professor of Cognitive Science, Director of Research, and leader of the “Music Cognition and Action” research program in the MARCS Institute for Brain, Behaviour and Development at Western Sydney University. Previously, he held positions at Haskins Laboratories (USA) and the Max Planck Institute for Human Cognitive and Brain Sciences (Germany). Past academic honours include an Australian Research Council Future Fellowship, a Leverhulme Trust Visiting Professorship at Durham University, and a Visiting Professorship at the Central European University in Budapest. Peter has served as Editor of *Empirical Musicology Review* and is currently an Associate Editor at *Royal Society Open Science*, *Psychological Research*, and *Music Perception*. His research examines the behavioural and brain bases of human interaction in musical contexts. – Address: The MARCS Institute for Brain, Behaviour and Development, Western Sydney University, Locked Bag 1797, NSW 2751 Penrith, Australia. E-mail: p.keller@westernsydney.edu.au.

I arrived in Berlin on a EURIAS Fellowship with the mission to write a book about the psychology and neuroscience of music. After a blissfully busy ten months, I left with a new view of the world. Music remains at the centre of that world, but it is now closely connected to ideas from other disciplines including evolutionary biology, archaeology, history, and sociology. The Berliner Freikörperkultur School of Philosophy also made its mark. The generous fellowship and idyllic conditions at the Wissenschaftskolleg zu Berlin allowed me to make solid progress on my project. Nevertheless, new discoveries that

seemed impossible to avoid under those favourable circumstances mean that work on the book manuscript is ongoing.

A large number of invaluable experiences come to mind when I reflect on my Fellowship time. In an attempt to provide a reasonably comprehensive but succinct report, I have selected a handful of highlights.

Intellectual flights of fancy can be ineffective or even risky if they are not firmly tethered to practical realities. The streamlined infrastructure and professional staff of the Wissenschaftskolleg provided such grounding. I am particularly grateful for assistance in arranging interviews with eminent musicians, including members of the resident ensemble Quatuor Diotima, as well as local musicians from chamber ensembles and the Berlin Philharmonic.

A staple of life at the Wissenschaftskolleg is the program of regular colloquia, communal meals, and special events. In addition to their primary purpose, each occasion afforded the opportunity for chance encounters that could lead to unforeseen vistas. From discussions with evolutionary biologists, I learnt that the origins of social behaviour – a key consideration in understanding why musical capacities evolved – occurred further back in time and in much simpler organisms than is typically assumed. Sociologists helped me to realize that psychological processes that operate at the level of an individual or small group are sometimes best understood by considering them at much larger scales, supporting the idea of music as a microcosm of human interaction. From the archaeologists, I learnt about the windfalls but also potential limits in what ancient objects can reveal about prehistoric events and patterns of musical behaviour (we may never know whether holes in a 60,000-year-old bone fragment were produced by a skilful flute maker or a hungry carnivore). From the historians, I learnt that even when the investigative trail suggests that everything is somehow fantastically connected (a case being the emergence of mathematical theories of musical tuning and cosmology throughout ancient Eurasia), linkages based on reliable records are paramount when forging a coherent and valid story.

Among the many invaluable services provided at the Wissenschaftskolleg, assistance with fact-finding about obscure occurrences can be taken as an illustrative case. On one occasion, for example, the library staff came to the rescue when a question arose as to whether it was George Frideric Handel's coat button or a musical score that stopped a sword that could have killed him during a duel fought outside the Hamburg opera in 1704. This turned out to be a tricky issue to resolve, as the event was apparently not newsworthy at a time when scuffles amongst budding glitterati were common (it turns out that J. S. Bach fought a duel with a bassoonist a year after Handel's fracas). The thought

that institute colloquia, had they occurred a few centuries ago, might have concluded with bouts of fencing, fisticuffs, or pistol duelling is a bizarre one to entertain.

An exciting initiative at the Wissenschaftskolleg (speaking of scuffles) was a forum designed to facilitate dialogue about the relationship between research in the humanities and in the natural sciences. As a psychologist with a musicology background currently working in the field of neuroscience, it was comforting to realize that any inner struggles I may experience are not mine alone!

Being based in Berlin made it impossible to avoid interactions with world-leading researchers from prestigious institutions, which happened to be within effortless reach of Grunewald. For me, this proximity enabled frequent contact with researchers in the Transcultural Musicology Department and the Systematic Musicology Department at Humboldt University, as well as visits to the Max Planck Institute for Human Development and the German Archaeological Institute, to discuss potential avenues for collaboration. In addition to these Berlin-based benefits, I was also privileged to attend the EURIAS annual meeting at the Aarhus Institute of Advanced Studies in Denmark. Meeting with EURIAS Fellows from across the program revealed unanticipated areas of common interest that promise fruitful future collaborations.

Back in Berlin, one cherished experience that I would almost certainly not otherwise have had was the chance to visit the Barenboim-Said Akademie for a reason other than attending a concert in the splendid Pierre Boulez Saal. This opportunity arose when I was invited to lecture in the musicology course for students training to be orchestral musicians. The mission of the Akademie – to train ensemble musicians not only to be exemplary artists but also to be thinkers who can use music to contribute to the future of civil societies – resonates strongly with the thesis motivating my project, and it was inspiring to meet key people at the Akademie.

One of the less conventional parts of my project deals with the use of music in the context of detention and torture. This line of inquiry led to an investigation of musical practices in prisoner-of-war camps. Amongst countless tales of misery, the composition and premiere of Olivier Messiaen's *Quartet for the End of Time* at the Stammlager VIII A camp during the Second World War stands out as a miraculous musical achievement. Understanding the circumstances surrounding this event and its psychological effect on all involved is a major undertaking. To take steps in this direction, I was fortunate to visit the former camp site near Görlitz with Frank Seibel, President of Meetingpoint Music Messiaen e.V., as my guide.

In what turned out to be an antidote to the gravity of the topic of prison music, my project also ventured into questions concerning the use of music in romance. In addition to analysing playlists on Spotify (the online music streaming platform) that people have curated for personal use in their lovemaking, I had the opportunity to follow up a research study in which we found subtle changes in the voices of boys from the St. Thomas Choir of Leipzig when girls were in the audience. The EURIAS research allowance enabled me to run a large-scale listening study over the Internet to test people's perceptual sensitivity to these vocal changes.

Alongside intellectual pursuits, life at the Wissenschaftskolleg had health benefits. If one ever tired of long walks in picturesque settings, then Berlin's lakes provided places to ponder while taking exercise. The nearby Halensee is a convenient location where natural wonders are on display right in the heart of Berlin. On sunny days in the spring and summer months, the lakeside is home to a convivial colony of nudists. Most can be found in varying states of repose on the redolent grass, while others frolic in the shallows or roam freely, either individually or in small clusters. I was honoured, as a speedo-clad sojourning Australian, to be allowed to make use of their unofficial beach as an entry point to complete my afternoon laps. I have fond memories of Helga and Klaus, leathery doyens of the Berliner Freikörperkultur School of Philosophy, routinely offering their friendly words of wisdom.

The foregoing serves as a testimonial to the remarkable intellectual, cultural and personal experiences that I enjoyed during my EURIAS fellowship at the Wissenschaftskolleg. On one level, the fellowship provided an opportunity to focus inwards and work on my project with a degree of breadth with depth that would not have been otherwise possible. At another level, however, an outward focus was encouraged by the presence of brilliant yet congenial Fellows and the enriched environment of vigorous intellectual stimulation. This balance was to some extent epitomized in the Berliner Abend, a meeting of former and current Fellows where the atmosphere can be described as a blend of academic rigor and glamour. I was fortunate to have the opportunity to present on the topic of "making music together" at one of several roundtable discussions at this event. Afterwards, once everyone had spilled out from the intimate setting of each of the roundtable rooms, the institute was transformed into a sea of enlivened minds that created a buzz of excitement befitting the Vienna New Year's Concert. For me, this parallel brings home the message that shared intellectual and musical experiences, both salient features of life at the Wissenschaftskolleg, can have equivalent effects on how we interact and collaborate with our fellows in everyday society.