

Appendix 1 to Chapter 8:

Simply the best!

Working visit of the Olympiastutzpunkt (OSP) Berlin by one of the world's leading sport scientists

On 8th and 9th August 1995, Gideon Ariel was guest at the OSP support centre for olympic sports in Berlin.

Proverbial Californian kindness and civility might have been one reason why Professor Dr. Ariel found nothing but praise for the OSP sport-scientific centre. But the Professor was no doubt genuinely impressed by what he had seen and experienced at the OSP and the Sportforum multi-sport facilities.

No sooner had the OSP director, "long jumper" Armin Baumert, welcomed "discus thrower" Gideon Ariel, they began to dwell on the subject both of them knew and have lived by heart: ATHLETICS from the 1960 Rome Olympics to the 1995 Gothenburg World Championships. As their conversation went through the chain of events, many stations of the extraordinary career of Gideon Ariel were highlighted. In 1960 and 1964, he paraded the Israeli flag in the olympic opening ceremonies of Rome and Tokyo. He then studied and took a doctor's degree in sport sciences in the United States, followed by a professorship at the University of California. Being among the world's first and leading experts in his field, he developed computer-aided video analysis systems for motion sequences in sports and further sophisticated them by designing intelligent strength diagnostic and training apparatus. Based upon these systems he diagnosed and guided top athletes like Al Oerter, Carl Lewis, Mike Powell, Jimmy Connors and others. For nearly nine years Professor Ariel was the US National Olympic Committee's

representative for biomechanics and training sciences and today is regarded the "father" of the American olympic centers. Nowadays, he is a sought-after lecturer at all facets of sport science conferences. As President and spiritual founder of Ariel Dynamics, Inc., he has made his inventions well known and available all over the world. The Ariel technology is also applied for coaching and diagnosing hopeful young athletes and olympic candidates from Berlin, which practically brought about the Professor's links with the Berlin Olympiastutzpunkt.

The first day of visit was set aside for discussing a few problems that had been encountered during the application of Ariel systems, and for explaining and demonstrating useful test procedures for various sports as well as theoretical approaches. Being an expert in informational sciences, Professor Ariel did not find it difficult during demonstrations to browse through the hard disc directories of his systems looking for data on the kind of sporting disciplines and the number of athletes analysed at the OSP. With growing enthusiasm did he watch motion analyses of track-and-field athletes, swimmers, speed skaters, gymnasts, weight lifters, canoers etc. on the APAS picture analysis system, discover more than 1,000 isokinetic strength analyses on the multi-functions system, and come across a vast number of rehabilitation practises on the arm-leg system. All excellent examples, as he found, for a well-achieved dovetailing of theory and practice which he has incessantly called for. Also the OSP director and his co-workers noted with pride that their long-term principles (e.g. "a good theory is the most practical thing"; "smart athletes demand nothing but the best possible coaching")

were not just accepted by their day-to-day clients - namely the coaches and athletes - but likewise recognised and appreciated by such highly-competent authority. And we were also impressed: when some minor, but unnerving and time-consuming problems crept up during calibration of the abdominal and back muscle diagnostic systems, Prof. Ariel did not only prove his scientific expertise but also his commitment to perfection. Neither the approach of dinner time nor other appointments could keep him and his colleague from solving the problem up to each and every practical detail.

High on the agenda for the second day was a three-hour presentation and demonstration by G. Ariel before an audience made up of coaches (among others Herr Lindemann and Herr Frischke who even took a break from the ongoing preparations for the European Swimming Championships), scientists (so Prof. Dr. Wolff, Dr. Mattes and Dr. Beyer from Berlin's Humboldt University) and representatives of other institutions (e.g. Dr. Quade from BISP, L. Heine from the Cottbus/Frankfurt-Oder OSP, Dr. Muller from the Helmholtz Institute of Aachen). Gideon Ariel's main message was his perspective of an enormous potential for coaching strategies being inherent in the determined application of science and technology. In the future the worldwide, direct cooperation between coaches and scientists through global communication networks will be the way to success. It emerged during the technical demonstrations that there is no demand for any apparatus that requires the athlete to adapt to a certain pattern. What really matters is to design coaching devices and systems that are themselves adaptable to the individual athlete, his strength capacities at different load angles, his state of fatigue. In this respect, weight-lifting coach Eberhard Deutscher and women's judo coach Uwe Muller reminded Ariel of concrete, still unutilised potential in his multi-functions system. This was followed by a discussion on the EMG uncertainties with Prof. Dr. Wolff and the OSP physicians Dr. Lehnigk and Dr. Wendler, while Dr. Quade contributed well-founded and generally interesting facts on the complex subject of eccentrics. Whenever the efficient use of strength and motion techniques came up for discussion, Professor Ariel referred to Jonathan Edward's outstanding performance at the recent World Athletics Championships setting a triple jump world record of 18.29 metres. He was there when it happened, and it came to no one's surprise to hear that Ariel recorded Edward's jumps using three cameras. The analysis of that material is now eagerly awaited.

Gideon Ariel has no reason to be modest when evaluating his systems. Still he never ceases to underline that the work of coaches and the daily chores of training will always be the predominant factors for success. During the Berlin presentation he could convince himself of the close and smooth cooperation between the OSP and the coaches, the long-term approach to scientific and technical support (envisaging, among others, the OSP's integration in the World Wide Web for direct cooperation with Ariel, from later this year), and the application of that know-how in the day-to-day training. Therefore, the OSP Berlin and, in general, the OSP concept is highly regarded in Germany, true to its motto: Simply the best! Armin Baumert will not object...

Dr. Jochen Zinner / Martin Seeber