

The Years in Mainz – II

Hans Mislin as a teacher

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There is no more fitting metaphor to characterise Hans Mislin's role as an academic teacher than that of an 'intellectual arsonist'. Those who were only remotely acquainted with him – for example those biology or medical students who witnessed him in action only in a crowded lecture series in basic zoology – may have felt somewhat ill at ease on account of his intellectual flame, which could flare up and subsequently subside at seemingly irregular intervals. These people may even have gained the impression of something unsystematic, confused and impenetrable. If they never dared to approach him more closely, in a smaller, specialised lecture or a seminar, for instance, they may have felt at a loss, may even have felt a kind of rejection. Those who were prepared to approach Mislin, however, the source of this blaze, and who listened to him to get to the bottom of a certain matter, tended to become consumed with the flames themselves as they suddenly perceived connections that they had hitherto hardly been aware of. This fire blazed up, bringing in its wake a burning intellectual enthusiasm and a more intensive preoccupation with the matter in hand. The blaze never let such people free from this man's spell.

As a teacher Hans Mislin also had a polarising effect. Everybody who really has something to say will confirm that it is not possible to pass through life without rubbing other people up the wrong way. In fact, Hans Mislin did not seek a smooth path. Many tended to have a negative attitude to him: those who had little opportunity to attend his teaching courses or experienced him only in the mass sessions in the undergraduate curriculum, and those who lacked the magnanimity to tolerate a slip of the tongue or an insignificant error in the course of his very comprehensive sessions. Rivals or, to put it more precisely, colleagues who believed themselves to be in competition with Mislin, used the second-hand stories of infrequent lecture attenders to build up a front of opposition.

With hindsight, this rejection bore amazing consequences. For example Hans Mislin was about ten years ahead of his time as a teacher of environmental conservation. If his words had been spoken later on he would

definitely have become a cult figure in the ecological movement. At that time, however, he only had to persuade a group of students to clear up the rubbish in the forest, and straight away his mental health was called into question by the stick-in-the-mud types. With regard to his relationship to environmental problems Mislin was continuing the intellectual tradition of ecology and conservation as practised by Jakob von Uexküll. Mislin modified it, taking the requirements of the modern world into consideration. As early as the late fifties and early sixties, with almost prophetic powers, he clearly recognised the great ecological problems that the world is confronted with today. If the powers that be and those in high teaching positions had been prepared to pay attention to Mislin at that time and be influenced by his enthusiasm, instead of just listening benevolently, some of today's difficulties might have been nipped in the bud and prevented from assuming the proportions which now face us.

Hans Mislin incorporated his ecological ideas into his teaching and developed them further by so doing. He first established a zoological seminar with the theme 'Balance and Imbalance in Nature' that was scheduled to run over several terms. The scientific-philosophical colloquium that he was involved in founding included the topic 'Humans and their Environment' which was dealt with over three more terms. Eventually a 'Human Ecological Seminar' evolved that initiated co-operation between the four universities in the Rhineland – Basel, Strassburg, Mainz and Wageningen – based on the theme 'Habitat Rhine'.

His interest in complex systems and habitats, coupled with his analytical approach, had an influence on his teaching – both in seminars and colloquia and in field excursions. He was particularly interested in marine habitats, and he organised annual large-scale excursions to marine biological coastal stations. The station at Arcachon on the French Atlantic coast should be mentioned in particular, as a place where Mislin infused his students with enthusiasm for many years. As a Swiss national he could be accepted without prejudice, and was in a good position to promote the tentative efforts

being made towards German-French understanding, fostering contacts between people who twenty years earlier had been at war with each other. In an exhibition marking the fifth Arcachon excursion in 1965, the Institut Français in Mainz paid tribute to Mislin's commitment to reconciliation through the connections forged by his students.

The great innovative powers that Mislin demonstrated within his physiological laboratory research also coloured his work as a university teacher. During physiological demonstration lectures he created an atmosphere of real experimentation in the lecture theatre and thus made the subject more accessible to the listeners than in any other way. The basis of this was a mobile experiment stand that could be provided with all essential connections. High-performance projecting equipment enabled each experimental result to be shown on the theatre wall in shadow outline: for instance, the effect of applying a substance to an isolated organ. All the technical and scientific assistants had to spend hours in advance preparing and assembling the equipment. While they were feverishly trying to bring about the desired results in the lecture theatre, Mislin explained the basic principles and expectations. There was never any real question for him of things going wrong.

In this connection, especially, it became clear to the audience that Hans Mislin did not accept the concept of 'impossibility'. He rejected the notion in principle. He only asked about which problem had presented itself and not whether there was a solution, for he assumed this anyway. Much experimental finesse was rooted in this attitude, and it bore fruit among his co-workers, who developed innovative approaches to research. His attitude demanded in turn a similar view of things among his students. The assertion made by one of his team that 'it's not possible' was usually met with the instruction 'do it', that left no room for further delay. No other course of action remained open other than to consider the matter carefully and then to manage it somehow. It usually worked. Permanent nudges of this kind made the people concerned tackle difficulties with a positive approach, and this is invaluable.

The first black and white video technology suitable for use in a laboratory was applied by Mislin as soon as it became available. It allowed him to demonstrate a much broader spectrum of experiments by providing direct transmission from the experimenting room into the lecture theatre. Today this might be termed a zoophysiological live-show. The audience at the end of the sixties regarded it as a new experience, a new world that was being opened up. It was only years later that

video technology gained general admission to lecture theatres. Of course, the practical sessions also benefited from this love of experimenting and demonstration. Hans Mislin set up a precision-instrument workshop where many prototypes of research equipment were made, together with small series of individuals' own creations: these pieces of experimental apparatus found their way into the beginners' practical sessions. Some of the devices developed at this time are still used in education today.

The great success of Mislin as an academic teacher, whose influence can still be seen in his students and trusted colleagues, lies not so much in the transmission of knowledge in his own research field of circulation physiology, as in his amazing ability to make clear higher connections, to initiate consideration of the hitherto unthought-of at the borderlines of the bio-sciences, and to further interdisciplinary thought. Hans Mislin always managed to stimulate conversation in whatever groups he moved. It might sound exaggerated but it is by no means incorrect to say that Mislin approached people and immediately infused them with enthusiasm. Hans Mislin: biologist, philosopher, musician and, last but not least, promotor of fruitful discussions. All these aspects came together in a particular type of teaching session: the private seminars that he held in his own home. Here one could best get to know him. Students and assistants assembled for these, not only from the faculty of zoology, but also from other faculties. The discussion topics were usually of a scientific-philosophical nature, evolving in all conceivable directions of human spirit and knowledge. There were readings, conversations but never disputes, and the meetings were always terminated with music. Worlds of ideas that young students had never dreamed of were opened up as they enjoyed the privilege of being included in these evening meetings for the first time. The fascination exercised by Mislin became tangible reality.

He was in his element in these discussion meetings which incorporated different disciplines and this was obvious during the last stages of his life. When he was visited by former students and friends in his retirement, it was always his aim to organise a discussion, if possible in a forest clearing far away from the hectic daily activities. He attempted to choose a discussion topic that would appeal to everyone and to devote himself to it no matter what turn it should take – and it usually developed in a pleasant way.

Hans Mislin was an academic teacher who was not only open-minded towards the world but who also opened intellectual worlds for others.