

Memories of Maggie Boden

Phil Husbands, AI Group, Department of Informatics
University of Sussex

Maggie Boden was a powerful and unique force in Cognitive Science. Her pioneering interdisciplinary research, encompassing philosophy, psychology, AI and more, did much to define, motivate and shape the field. Her influence was deep and unusually widespread. By the time I first met her, in 1988, she was already very well established at the academic top table. I was being interviewed for a junior lectureship in AI in COGS, the revolutionary interdisciplinary school she and colleagues had recently established at Sussex University. As Dean, she was chair of the appointment panel. Like countless others, I had first become interested in AI through reading her 1977 book *Artificial Intelligence and Natural Man*. I was extremely nervous as I waited my turn outside her office, partly because I was in awe of the great woman. Suddenly Maggie burst through the door, all smiles and charm as she welcomed me in. My nerves melted away and I got the job. I was lucky enough to interact and collaborate with her for many years after that.

Maggie was always very direct, sometimes brusque, in conversation about intellectual matters. There was no time for unnecessary niceties, the advancement of knowledge and understanding was the point. This became clear to me a few weeks after I started at COGS. One morning there was a knock on my office door and in strolled Maggie. Hello Phil, now I want you to explain the difference between these two types of evolutionary algorithm, she said. My PhD research at Edinburgh University had been on evolutionary search algorithms, a topic that was hardly known in the UK at the time. But Maggie knew something about it and was keen to know more, not least because of her strong interest in biologically inspired approaches. I gulped and tried my best. It wasn't good enough. She waved at the scruffy diagrams I'd chalked on the blackboard, punctuated with scrawled equations. She said, I'm going to have to ask you to go over it again. There was a sternness, but it was undercut by her disarming smile. The scruffy diagrams she could live with, it was the equations that were the problem. She asked me to go over each one explaining it in plain English. Always do that if you want to widen your audience, she suggested. It was a good lesson, and one that was to prove important as my own research became increasingly interdisciplinary over the years.

Maggie had a strong personality, but her kindness and humanity shone through. She really cared about people. After any personal triumph, or moment of difficulty, there would be a postcard from Maggie waiting in your pigeonhole. Not just any old postcard, but a carefully chosen, often quirky, image with a handwritten message of congratulations or commiserations. She was very generous with her unrivalled influence and contacts, creating opportunities for people she wanted to see flourish. Her hand in these matters was often unseen; it wasn't until years later that I discovered that her recommendations lay behind certain invitations to contribute to important publications, or to give keynote speeches.

Maggie was a maverick, like one of her early influences: Grey Walter, the neurophysiologist and cyberneticist. In 1951 a teenaged Maggie had attended the post-war Labour government's great

tonic for the masses, The Festival of Britain. One of the most popular attractions in the science section was an exhibition of Grey's famous mechanical tortoises, the first ever autonomous mobile robots. Simple sensors and a small network of electronic neurons generated intriguing behaviours as the tortoises interacted with each other and a light source. Maggie was fascinated by the robots, but also struck by the philosophy behind them: an attempt to understand more about biological life by building machines with life-like properties. This influence stayed with her and helped to form her life-long intellectual interests.

Creativity was a major focus of the latter part of her career, and in the mid-2000s I worked with Maggie on a project in this area that had been put together by artist Paul Brown. An abiding memory of Maggie comes from one of the early project meetings. Maggie, Paul, artist Ernest Edmunds and I, or some combination thereof, were gathered to scope the work. Discussions, gently led by Maggie, focused on the feasibility of creativity in autonomous machines, and whether or not it was possible to create, through a mechanical process, an artwork that did not exhibit any discernible influence of the designer of the mechanical process. As the talk became gradually more animated, as if intoxicated by the ideas bouncing back and forth, her grin grew broader, her eyes shone with delight.