

Background and Foreword

The Centre for Advanced Study (CAS) in Oslo has two overriding long-term objectives. The first aims at enhancing the quality of Norwegian basic research to the highest international level and standard. Here the call is for specialization and penetration in depth – to benefit basic disciplinary science. The other aims at promoting the same quality and achieving the same level of excellence when it comes to interdisciplinary research. Here the call is for wholeness and integration in breadth as well as in depth – to benefit basic complex system science. The two objectives relate equally to the humanities, the social sciences and the natural sciences and both are supposed to find expression within and between the three fields of academe.

The CAS has no enduring thematic profile. The profile of the Centre is compositional, in that humanists, social scientists and natural scientists are present at all times. This opens up interesting opportunities for interdisciplinary activities, not least in combination with the fact that the premises of the CAS are physically restricted and the logistical structure is one of oneness. This means that the CAS is located in one building, has one seminar room, one luncheon room, one administrative staff and one Scientific director. Such a setting is new to most of the CAS' guest professors, who are used to working in different faculties located in different buildings and in different departments located on different storeys, using different seminar rooms, auditoria and canteen facilities. On campus, professors are separated by lawns (Keep off the grass?), asphalt (pretty hard on the feet?) and floors (connected by steep stairs and out-of-order elevators?) so it takes some effort to overcome these obstacles in order to meet with colleagues in other departments. At the CAS the fellows are merged into one multidisciplinary faculty and share all facilities so that no effort is required to overcome any obstacles. This mix of academic specialties, the physical closeness of the groups and the oneness of the infrastructure make the CAS an ideal arena for science dialogue across disciplinary boundaries and academic fields.

In 2003/04 the CAS took stock of this situation and decided to organise a series of luncheon seminars at which the fellows were invited to give presentations on their specialities to plenary sessions of all the groups with the aim of fostering a feeling of professional and social community through dialogue. Three groups were in action. The humanists were working to further *A New Understanding of the Mental*, the social scientists aimed at developing *A Comprehensive Model of Human Memory*, whereas the group of natural scientists were concerned with *Food-webs, Stoichiometry and Population Dynamics*. Each and every one of these groups could from its specialist stand shed some light on one or both sides of the relationship between body and mind, biology and soul, and matter and spirit. Thus, this relationship became the least common denominator for the groups and the seminar.

The format of the seminar was quite relaxed in that each presentation should not last for more than 30 minutes followed by an equally long discussion session. And, equally important: the seminar should only take place once a week. The presentations soon proved that the 'memory

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group' and the 'mental group' had some interest in common when it came to concepts relating to knowledge and memory. The mental group, guided by a philosophical approach, introduced and used concepts such as *implicit* and *explicit knowledge*, *tacit knowledge*, *self-knowledge* and *implicit perception*, whereas the memory group, who applied a psychological approach, used concepts like *knowing* and the *feeling of knowing*. These conceptual variations relating to the concept of knowledge gave rise to most interesting discussions between the involved disciplines and groups. One of the psychologists concluded that the variety of concepts and approaches introduced in this setting had resulted in an extension of his international network and made useful contributions to his own research. Another example: In one of the presentations by the 'stoichiometry group' the decision was made to deviate from what had originally been planned and instead introduce the concept of *biological and genetic determinism* because the theme was assumed to be "of some relevance ... (to) the philosophy group." One of the biologists stated in writing that he was grateful "... to the lunch group at the CAS for a variety of fascinating conversations during *middag*", indicating that the discussions initiated at lunch was continued during dinner. More examples could be cited. But to cut this already too long background note short, a summing up is required: the luncheon seminar turned out to be instrumental in creating a feeling of both social and professional community between the groups. At the same time it produced an interdisciplinary atmosphere for the clarification of concepts of significance in theory-building in more than one discipline and across group boundaries. Last but not least: The suggestion to produce this booklet of condensed versions of the 24 presentations was not put forward by the Scientific director, but by the fellows themselves. One stated reason for this was that such a publication would prove useful in the work of the groups after they had ended their stay with the CAS.

One last clarification: The first article in the booklet: "The Gribbin Syndrome and the Entities of Knowledge Integration" was never part of the seminar series. It was included to argue against the widespread assumption that specialization in basic research – which relates to the first objective of CAS – is the opposite of complex system science – which relates to the second objective of CAS. As argued in the article, specialization is the prerequisite of integrated research, implying that the two objectives are compatible, not contradictory.

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Willy Østreng
Scientific director and Editor