

95

Annual Report



Stiftelsen

RIKSBANKENS JUBILEUMSFOND

The Bank of Sweden Tercentenary Foundation

Annual Report
1995

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The Bank of Sweden Tercentenary Foundation (Riksbankens Jubileumsfond, RJ) is an independent foundation with the objective of promoting and supporting scientific research.

The Foundation was instituted in 1962 by means of an endowment from the Bank of Sweden, which wished thereby to commemorate its tercentenary in 1968 and, at the same time, to advance "an important national cause". The annual return on the anniversary donation was to be used for promoting scientific research linked to Sweden.

The Foundation's statutes were adopted in December 1964. The present statutes (adopted on 1 January 1968) state, for example,

The Foundation's tasks, inception and aims

that priority shall be given to those fields of research whose funding requirements are not adequately met in other ways;

that the Foundation's funds shall be used especially for supporting major, long-term research projects;

that special attention shall be paid to new research tasks requiring prompt, vigorous action; and

that the Foundation shall seek to promote contacts with international research.

The Riksdag decided in 1993 that another donation would be made to the Bank of Sweden Tercentenary Foundation. Attached to the decision was a memorandum drawn up in the Prime Minister's Office. This memorandum emphasized some guidelines that were to characterize the activity initiated by using the donation. The areas of use specified included the following:

- support for projects and programmes involving a multidisciplinary or interdisciplinary approach
- establishment of networks or more permanent forms of cooperation, nationally and internationally, eg, by starting an international programme of exchange for researchers
- promotion of researcher training and recruitment
- promotion of researcher mobility internationally and between universities/colleges and other activities.
- The first grants from the Foundation were awarded in the autumn of 1965. Since then, a sum of around SEK 2.7bn (in 1995 monetary value) has been awarded for scientific research. The Foundation's total assets amounted to SEK 4.1bn at year-end 1995.

During 1995, the Bank of Sweden Tercentenary Foundation completed 30 years of support for research. The first grants were distributed in the autumn of 1965. The Foundation held no special 30th-anniversary celebration. Instead, the date was commemorated by some activities linked to a few highly successful projects that had received support from the Foundation back in the introductory year.

In view of the 50th anniversary of the end of the second world war in May 1945, it appeared natural for the Foundation to commemorate this memorable event in co-operation with researchers from the project "Sweden during the Second World War" (SUAV). The conclusion of peace 50 years ago was solemnly commemorated in the Riksdag on 9 May, under the chairmanship of Speaker Birgitta Dahl, with a lecture by Assistant Professor Stig Ekman entitled "Skilful Realpolitik or Unprincipled Opportunism – the Coalition Government's Foreign Policy in Debate and Research". Ekman's lecture was also the last in a long series concerning "Social Issues in a Research Perspective". These lectures had been arranged by

the sector committee for research on the Riksdag's functioning and procedure, which concluded its work during the year. In addition, the Foundation held a major international conference in the Riksdag building on 21-22 August, on the theme of "The

Managing Director's comments

Experience of War, Self-Image and National Identity: the Second World War as Myth and History".

The second major project, which had already been initiated by the date of the Foundation's very first distribution of grants, 7 October 1965, was "Local Authorities' Classification – Local Authorities' Autonomy". To discuss the social importance of this project and also its significance for the development of research environments in political science, a meeting at Rosersberg Palace was arranged on 12 October, 30 years later, with the researchers who – under the leadership of Professor Jörgen Westerståhl – conducted this work at all the departments of political science in Sweden.

This year, the form of the annual report has been revised. As part of our work to improve our provision of information on research, we have chosen this year to let a few of our grant recipients describe their projects in more detail, while the other new research projects are presented in a separate catalogue as an annex to the annual report.

- Ekman's Riksdag lecture from the long since concluded project "Sweden during the Second World War" is included.
- Professor Anita Aperia, whose department Women's and Children's Health at the Karolinska Institute is also the beneficiary of Erik Rönnerberg's second donation for the benefit of research on illnesses in the early childhood years, reports on her newly concluded project "Hereditary changes in Renal Function as a Cause of High Blood Pressure".

- Finally, Hans Davidsson of the Gothenburg College of Music reports on the work situation in the integrated programme of research on changes in the Northern European art of the organ, 1600-1970. This programme is an example of project support within the framework of the first decision on a contribution from the Humanities and Social Sciences Donation.

Ever since it was founded, the Bank of Sweden Tercentenary Foundation has been a substantial resource for research in the humanities and social sciences, in particular. Since the start, more than 4,800 grants have been distributed for a total amount of almost SEK 2.7 billion. The average size of an annual grant for a project has been roughly SEK 500,000.

The financial basis of activities to support research has successively improved in the years since 1988, when the Foundation itself became responsible for its own financial administration, with opportunities for carrying out all kinds of investments representing appropriate forms of capital management. The Foundation's capital has been considerably boosted thanks to both successful financial management and the capital contribution in 1994 to support research in the humanities and social sciences. Accordingly, it has been possible to raise considerably the amount of annual support for research activities at Sweden's universities and colleges.

Since it was possible to distribute nearly SEK 50 million in 1995 to 52 new projects, the average size of an annual grant from the Foundation has risen to nearly SEK 1m. This highly marked change over the past two years has enabled the Foundation, in a manner entirely different from before, to live up to the content of its statutes where they state that "the Foundation's funds are, in particular, to be used to support major and long-term projects" (§2). The research community has therefore been gratified that it has once again become feasible for the Foundation to support projects with a substantial element of assistance on the part of doctoral students as well. Another development that will make life easier for Swedish researchers is the Foundation's decision that applications for both the anniversary donation and the humanities and social science donation will, starting in 1996, be received and processed on one and the same occasion.

Finally, I would like to express a wish that the proposal for overview of the tax regulations for foundations, on which the Foundation has had reason to express its views during the year, will result in the government taking a clear decision that the Foundation – as an enduring Riksdag foundation and one that has supported advanced scientific research for 30 years – will remain capable, without risk of its own capital being eroded in real terms, of augmenting its support for the subject areas of the humanities, theology, law and the social sciences, in particular.



Dan Brändström

The Bank of Sweden Tercentenary Foundation supports advanced research in the form of project grants to individual researchers or groups of researchers who have applied for funds.

Ever since the inception of the Anniversary Fund, a certain preference has been shown to research in social science and the humanities. A very strong contribution has been made over the past two years for the benefit of research in the humanities. In 1995, 32% of the Foundation's research budget was allotted to the humanities and theology, and 43% to the subject areas of the social sciences and law. Research in medicine, natural science and technology received some 20%. The remaining 5% constitutes support for projects outside the universities and colleges. The grants classified as technical research are also characterised by a humanistic and social-science approach.

In the first place, priority is given to projects whose requirements are not met normally in other ways, eg, by means of grants from state research councils or other public authorities, each of which operates within a relatively well-defined sector.

Activities to support research

The Foundation is interested in supporting multidisciplinary or interdisci-

plinary research projects in which researchers from different disciplines, faculties, localities or countries collaborate. The Foundation's catalogue of grants awarded to date shows many examples of research projects of these kinds, especially within the framework of the humanities and social science donation.

Procedure

The Board of Trustees makes decisions about the award of grants by the Foundation. Incoming applications have previously been assessed and ranked in order of priority by one or, usually, more preparatory committees. Permanent and deputy Board members, and also external scientific experts from both Sweden and abroad, serve on each of these committees. As a rule, the applications have also been assessed by one or more external experts in Sweden or other countries.

Each application is initially assessed according to international standards and in relation to criteria of scientific quality and social relevance.

Decisions about grants for new projects are taken in two stages:

- 1) Assessments in the first stage are based on applications presenting brief overviews or *project outlines*. The preparatory committees then select the applications considered to show the highest scientific quality, to be of great interest to the Foundation, and to have been prepared by scientists adjudged competent and suitable for conducting the project in question. These researchers are then given an opportunity to submit complete applications. Other applications (project outlines) are rejected.
- 2) In a second stage, *complete applications* are assessed and arranged in order of

priority (as a rule after examination by external experts) before the final ruling by the Board.

Where applications relate to research that is ethically questionable, they are evaluated according to the same criteria and in the same manner as in the state research councils.

Applications for grants from the *humanities and social science donation* are assessed in accordance with the criteria in the instructions issued by the Foundation, which means scrutinizing the following aspects of the projects:

- their connection with the themes formulated in the instructions on "Foundations of Humanities and Social Science" and "Social Changes in Time and Space"
- the interdisciplinary nature of the project, ie, how co-operation is intended to proceed across the boundaries of institutions, faculties or universities
- participation of doctoral students
- ideas concerning research-information inputs.

In certain fields, which are regarded as important but have not received sufficient attention, the Foundation sometimes appoints special sector committees. The task of these committees is to review research needs and encourage scientific research and information exchange. The committees comprise researchers from disciplines of importance for the field, as well as representatives of disciplines of importance to society. The activities of these committees may be described as advanced work preparatory to research. These activities are concluded when sufficient attention has been gained from the research community and/or from the authorities that are responsible for ensuring that permanent resources are provided for the field in question.

During 1995, the Board decided to discontinue the sector committee for *research on the Riksdag's functioning and procedure* and that for *comparative research on changes in society*. Instead of these sector committees, the Board resolved to set up two new ones, one for research in *art and interpretation* and one for *capital-market research*. These two groups are commencing their work in 1996.

The Foundation also arranges conferences or symposia (occasionally in collaboration with some other research-promoting agency in or outside Sweden) for the purpose of presenting or reviewing the state of knowledge in a certain field or for identifying research needs.

In its budget, the Board has set aside special funds to support symposia, seminars and information inputs on research. During 1995, 51 such applications were dealt with, and of these 28 received grants for a total of some SEK 5m. This also permitted the holding of the Foundation's own international conference in the Riksdag building on 21-22 August, *The Experience of War, Self-Image and National Identity: the Second World War as Myth and History*. This conference, attended by a large number of national and international experts in the area, also contributed to the Foundation's commemoration of its own 30-year history.

The opening addresses were held by **Lena Hjelm-Wallén**, the Minister for Foreign Affairs, and the chairman of the organizational committee, Ass. Prof. **Stig Ekman** of the Department of History, Stockholm University. Three sessions then followed

under the chairmanship of Professors **Rolf Torstendahl** of the Department of History, Uppsala University (session 1), **Klas Åmark** of the Department of History at Stockholm University (session 2) and Ass. Prof. Stig Ekman (session 3).

During the first session, talks were given by Professor **Hans Mommsen** of the Ruhr University, Bochum (*The Impact of the World War II Experience on the German Political Identity*) and by Dr **Natalia Lebedeva** of the Russian Academy of Science, Moscow (*A Man and a Political System in the Second World War*).

The main talks in the second session were given by Professor **Brian Loring Villa**, University of Ottawa (*Forging National Identity or Creating National Traumas on the Battlefield: Vimy, Dieppe and the Canadian Experience*), and by Dr **John Keegan**, Warminster (*Do We Need a New History of the Second World War?*)

During the last session on the first day, treatment of the experience of the Nordic countries was commenced. Dr **Stefán Hjartarson** of the National Archives of Iceland, Reykjavik, spoke about *Iceland's Geopolitical Course*, and **Henning Poulsen**, Professor of History at Aarhus University, talked about *Denmark at War? The Occupation in Retrospect*.

The second day of the conference was devoted to Norwegian, Finnish and Swedish experience. Under the chairmanship of Acting Prof. **Per Thullberg** of the Department of History at Stockholm University, talks in session 4 were given by Professor **Ole Kristian Grimnes**, Oslo University (*Occupation and Collective Memory in Norway*), Professor **Matti Klinge** of Helsinki University (*The Importance of War Experience for Finnish Identity*) and Ass. Prof. **Alf W. Johansson** of the Military Academy in Stockholm (*Neutrality and Modernity: the Second World War as Non-Experience*).

The animated closing debate was chaired by Director **Dan Brändström** (session 5) and Riksdag Speaker **Birgitta Dahl** (session 6), who also held a concluding address. The conference will be documented by the publication of a book in English.

Research grants

During 1994, the first grants were awarded from the Humanities and Social Science Donation. Thanks to this new increment of resources, it has become possible to support more large-scale, interdisciplinary and long-term research projects. Many highly urgent projects for which it would have been difficult to obtain financial resources of the kind now made possible have started and are enabling more young doctoral students to obtain a meaningful education. In a special section a major project is presented in more detail, namely the programme on processes of change in the art of the organ in Northern Europe, 1600-1970, and connections between instruments and repertoire.

Other projects in the anniversary donation and the Humanities and Social Science Donation are presented in a separate project catalogue.

As in previous years, the pressure of applications to the Foundation was very heavy. On the two application occasions during the year, a total of 594 new applications were received, for an aggregate sum requested of SEK 587m. If the continuation applications are added, this makes another 123 applications, ie, a total of 717 and an amount requested of some SEK 668m.

Within the framework of the humanities and social science donation 207 new applications were received, of which 79 may be referred to the theme *Foundations of Humanities and Social Sciences* and 128 to the theme *Social Changes in Time and Space*. The applications approved (numbering 18) were evenly divided between these two themes. Nearly 9% of the amounts requested for new projects was granted, compared with 4.6% in 1993 and 8% in 1994.

During the year, the Foundation approved a total of 166 project grants and, in addition, grants for symposia and travel, salary-cost increments and also overhead increases, value-added tax, etc totalling SEK 124.5m. Most of these grants were administered by state universities and colleges. For grant funds disbursed after 1 July 1991, besides an overhead increase of 13.6%, a supplementary charge of around 8.7% for VAT, calculated on the project grant, is now also made. For grants after 1 July 1994 that are administered via state university departments under the Ministry of Education and Cultural Affairs, the Foundation must now also expect to pay a supplementary charge of 10% for costs of premises on the amounts calculated for the research projects themselves. Accordingly, this entails a total supplementary charge of the order of 33%.

Approved grants are made available subject to special conditions that are specified in the contract with each recipient. As mentioned above, the majority of grants are administered by a state educational institution, which also then acts as the employer of the staff paid from the grants. In the section "Statistical information on research grants" (page 71), certain data concerning the applications dealt with and grants awarded, especially for the anniversary donation, are reported in tabular form.

Information exchange, follow-up, etc

Many of the research projects supported by the Bank of Sweden Tercentenary Foundation shed light on problems that are of general social interest. It is therefore important that, if possible, findings obtained should also become known in society at large, outside the research community, so as to become the subject of discussion, critical review and utilization there as well. The Foundation has, in various ways, attempted to assist in facilitating such information exchange. It is therefore gratifying to note that, during the year, the Foundation was given the opportunity to supply detailed information both to the heads of the Ministry of Education and Cultural Affairs, **Carl Tham** and **Göran Löfdahl** (on 2 March 1995), and to the entire Parliamentary Standing Committee on Education (on 7 November 1995), concerning the focus of activities to support research.

In conjunction with the discussions with the aforesaid select committee, an opportunity was also provided to comment on the Foundation's statement of 1 June 1995 concerning a motion brought in the Riksdag (1994/95:Ub37) as a result of the reporting of grants in the previous year. This motion questioned whether the Foundation had not, in distributing its grants, shown a bias against research in the humanities and, consequently, also been unfair to women project leaders. The MPs who brought the motion suggested that there might be a connection between the low proportion of projects in the humanities that had been awarded grants and the small number of female project leaders. The Riksdag rejected the motion and

expressed itself in favour of *the trend of the Anniversary Fund and the measures that the Board intends to take to encourage female researchers to apply for project grants* (1994/95: UbU21 and 1995/96: UbU 2).

During the year, several activities of a national as well as an international character were carried out for the purpose of following up and disseminating knowledge of the research that is being supported, and of stimulating exchange of information about research findings between various groups in society. Some examples are given below. The Board of the Foundation made a study visit to Collegium Budapest from 1 to 3 November 1995 to monitor and evaluate the support being given for establishment of work at the college. As a basis for the discussion with Principal **Lajos Vékás** and the researchers linked permanently to the college, Professors **János Kornai** (economist), **Helga Nowotny** (sociologist) and **Eörs Szathmáry** (biologist), and also Administrative Manager **Fred Girod**, the Foundation used such documents as Lord Ralf Dahrendorf's *Report on Collegium Budapest*.

In the *sector committee for research on the Riksdag's functioning and procedure*, several well-attended meetings were arranged in the Riksdag building within the framework of the *Social Issues in a Research Perspective* lecture series.

On 21 February, Professor **Olof Ruin** held a lecture entitled *The Parliamentary System and EU Referenda in Sweden, Finland and Norway*.

On 4 April, **Folke Johansson**, Ph.D. gave a lecture on *The Riksdag and the Mass Media*. On this occasion, the book with the same title was also presented. This book is the result of a project initiated by the sector committee.

On 9 May, Assistant Professor **Stig Ekman** held a lecture with the title *Skilful Realpolitik or Unprincipled Opportunism – the Coalition Government's Foreign Policy in Debate and Research*. This lecture is published in its entirety in this annual report. During the year two other books, which were also the outcome of projects initiated by the sector committee, were also published in co-operation with Gidlunds Bokförlag. One was **Bengt Wieslander's** book on *The Work of the Parliamentary Ombudsmen*, and the other was *Parliamentarism in the Nordic Countries – a Distinctive Model?* (ed. **Nils Stjernquist**).

Another four projects were initiated by this sector committee. Final reports on these have not yet been issued. One is a project on parliamentarism in Sweden, which is being conducted by the Assistant Professor and MP **Björn von Sydow**. Another is one on the Riksdag's party groupings that is being carried out by Assistant Professor **Magnus Isberg**. Under the editorship of **Lars Gustafsson**, former MP and chairman of the Select Committee on Education, 13 MPs have described their memories and experience of select-committee work in the Riksdag in the book *The Parliamentary Select Committees from the Inside*. The book is available from January 1996. Finally, under former MP **Bertil Fiskesjö**, a project on *The Changing Role of Speaker in the Period of the Single-Chamber Riksdag* is under way.

In the *sector committee for comparative research on changes in society*, in co-operation with the Riksdag's Select Committee on Education, a seminar on *Educational Indicators* was held on 10 May 1995. Those invited to this seminar also included members of the Select Committee on the Labour Market and representatives of authorities concerned and researchers engaged in working in the field.

By way of introduction, Professor **Kjell Härnqvist** and Assistant Under-Secretary **Bertil Bucht** presented the OECD's "indicator project" and, in particular, "Education at a Glance III". A section on *training for the labour market* was introduced by Bertil Bucht and **Allan Nordin** of Statistics Sweden (SCB), with research commentaries by **Ulla Arnell Gustafsson**, Ph.D. of the Institute for Research on Working Life and Professor **Per Anders Edin** of the Department of Economics at Uppsala University. Those who opened a section on *attitudes and expectations concerning education* were **Archie McGlynn** of the Scottish Office Education Department and **Mats Myrberg**, Ph.D. of the National Schools Administration, with **Ingrid Carlgren**, an Assistant Professor of Education, and Director-General Prof. **Ulf P. Lundgren** as commentators.

The concluding discussion was introduced by MPs **Beatrice Ask** and **Berit Löfstedt**, both members of the Select Committee on Education.

On 8 November, a seminar on *Young People's Health* was held. Under the chairmanship of Assistant Professor and senior consultant **Kristina Berg Kelly** of the Department of Paediatrics, Östra Sjukhuset in Gothenburg and Professor **Sven-Olof Isacson**, Department of Social Medicine at Lund University, block 1 – "READY, STEADY, GO" – was introduced by the senior consultant for paediatrics in the county of Uppsala, **Claes Sundelin**, who described young people's medical and social situation and answered the question *How healthy are they?* The head of research at the National Youth Board, **Martin Börjesson**, dealt with the question of *The purpose of life* on the basis of sociological and modern theories of contemporary youth. **Monica Rudberg**, Professor at the Educational Research Institute at Oslo University, gave a descriptive account of *Boys and girls in the era of equality*.

Block 2, in the afternoon, was chaired by Director-General **Britta Bjelle** and Professor **Charli Erikson** of the National Institute of Public Health. In this block, "YOUNG PEOPLE'S RISK-TAKING", ie, *risks with their health and reproductive capacity*, Kristina Berg Kelly and **Agneta Ellström**, youth gynaecologist in Karlstad, reported their research findings on *young women's sexuality, development and risk-taking*.

The question of "DOES SCHOOL PROMOTE HEALTH?" was elucidated in block 3.

Under the chairmanship of the Foundation's Vice Chairman, MP **Jan Björkman**, and Professor **Lennart Råstam** of Lund University, Department of Social Medicine, there was a session of questions and comments on *what school does for students with psychosocial problems*. The Uppsala study was presented by Claes Sundelin and commented on by **Erik Bergström**, senior school doctor in Umeå. The question of *what school health services do* was answered by **Görel Bråkenhielm**, senior school doctor in Stockholm and chairman of the School Doctors' Association. With the help of the moderators, Professor **Bengt Starrin** and Kristina Berg Kelly, the concluding block on "WORK PROMOTES HEALTH AND WELFARE" was presented by **Urban Janlert**, MD and researcher at the Department of Epidemiology and Public Health at Umeå University, and by **Björn Lindgren**, Professor of Health Economics at the Department of Social Medicine, Lund University, who discussed *the effects of youth unemployment on health and the cost of young people's lifestyle*. This block was concluded by Kristina Berg Kelly

specifying the *knowledge gaps* and urging all those present to continue their research inputs.

Under the chairmanship of former Minister **Gertrud Sigurdson**, a discussion took place on *who is or are responsible for promoting children's and young people's health*. Those who opened this concluding and very lively debate were MPs **Bo Holmberg** and **Barbro Westerholm**, both members of the Parliamentary Standing Committee on Social Questions.

On 28 April 1995, the sector committee also submitted to the government its views on the survey by the Council for Planning and Co-ordination of Research on "Co-ordination of and demand for individual data for longitudinal and individual-based research". It may, in addition, be mentioned that the book *In the Eye of the Beholder*, edited by **Stefan Svallfors**, Impello 1995, was issued in the spring. This is a documentation of the sector committee's seminar of 30 November 1994 on the theme *Opinions on Welfare and Justice – Comparative Perspectives*. Editor Stefan Svallfors is an Assistant Professor at the Department of Sociology, Umeå University. The sector committee will conclude its work with a seminar on research on equality between the sexes on 25 April 1996.

To stimulate Swedish researchers to publish articles in the popular scientific press, the Foundation set up two prizes in 1988 for the best articles of the year in the magazine *Forskning och Framsteg* ("Research and Progress"), in the following subject areas:

*Social Science – Behavioural Science – Humanities
and
Natural Science – Medicine – Technology*

The prizes (SEK 25,000 each) for the best articles in 1994 were awarded on 23 March 1995 at a meeting attended by the Board and a number of specially invited guests, to

- **Sven Tägil**, Professor of History at Lund University, for his article *Unity and Fragmentation – the Everlasting Fate of Europe*
- **Hans Rickman**, Assistant Professor at the Astronomic Observatory, University of Uppsala, for his article *On a Collision Course with Us*.

The prizewinners were selected by members of the Foundation's Board – in the former case Berit Löfstedt, Lars Engwall, Christer Lindblom and Lars-Göran Stenelo (chairman), and in the latter Barbara Cannon (chairman), Viola Furubjelke, Per Björntorp and Rune Rydén.

At the same prizegiving ceremony, the recipients of the three scholarships from "Nils-Eric Svensson's Fund to promote exchange of young researchers in Europe" were also honoured. These scholarships were awarded to

- **Anders Kvarnheden**, Department of Physiological Botany at Uppsala University
- **Johan Torstensson**, Department of Economics at Lund University
- **Paul H. Vedder**, Centre for Intercultural Pedagogics, Rijks Universitet, Leiden, The Netherlands.

The scholarships (for SEK 50,000 each) were presented by **Ulla Kalén-Svensson**. The diploma was presented to Paul H. Vedder in conjunction with the Board

meeting on 14 December. The jury for the selection of the Swedish scholarship recipients comprised Professors Inge Jonsson (chairman), Barbara Cannon, Lars Engwall, Lars-Göran Stenelo and Jarl Torbacke, with Managing Director Dan Brändström presenting the recipients.

An additional prize was awarded at this ceremony. The Chairman of the Foundation, Professor Inge Jonsson, presented the Foundation's *Forschungspreis für Deutsche Wissenschaftler* within the framework of the mutual-exchange agreement with Alexander von Humboldt-Stiftung. This prize was awarded to the eminent German researcher, Director and Professor **Michael Stolleis** of the Max Planck-Institut für Europäische Rechtsgeschichte, Frankfurt am Main. Professor Stolleis has had a research link with the Faculty of Law at Lund University and its department for research on legal history.

As in previous years, several of the Foundation's grant recipients were awarded funds to enable them to present and discuss their projects and research results at university departments abroad or at international scientific symposia.

Since 1966, the Bank of Sweden Tercentenary Foundation has taken part in financing the Nobel Foundation's symposia. This was initially done in the form of annual grants. Symposium activities can nowadays be financed entirely from the return on a special symposium fund in the Nobel Foundation. A start was made in 1979 on building up this fund through a basic endowment in the form of a three-year grant from the Bank of Sweden Tercentenary Foundation, through contributions and royalties from the Nobel Foundation's own publicity activities, and also through four annual grants from the Knut and Alice Wallenberg Foundation. The symposium activities are headed by a committee comprising representatives of the five Nobel Committees, the Economics Prize Committee, the Bank of Sweden Tercentenary Foundation and the Wallenberg Foundation, with the Nobel Foundation's Managing Director as Chairman. To date, 100 Nobel symposia have been held. They have been devoted to areas of scientific breakthroughs of central cultural or social importance, and have earned a very high international reputation.

Individual researchers or groups of researchers are often invited to the Foundation's offices to present, and engage in discussions on, their current projects. At Board meetings, the research fields concerned are regularly presented by the scientific members.

These activities, of which the above are merely examples, are included as regular and self-evident elements in the Board's endeavour to promote contacts with international research and to stimulate the exchange of information between researchers from different fields, and also between researchers and the community outside their own. As pointed out above, the purpose is of course to try to help enhance understanding for and knowledge of the prospects, procedures and results of research, thereby providing the basis for assessments of past and present efforts using available research funds. The meetings attended by decision-makers, representatives of various social interests and also researchers are considered particularly valuable.

The Bank of Sweden Tercentenary Foundation is actively engaged in broad fields of scientific research. The range of expertise among the researchers on the Board and in the preparatory committees illustrates this fact. In addition, the Board comprises people with expert economic and political knowledge. This composition

means that the Board represents an unusually large field of experience, and thereby has a unique position as an all-round liaison body between different fields of research, and also between research and other important public interests.

Donations

Under a government decision in 1994, as mentioned in this section of previous annual reports, the Foundation received a donation amounting to SEK 1,500m to support humanities and social science research.

The current statutes of the Foundation (valid since 1 January 1988) state that *there is nothing to prevent additions to the Foundation's funds in the form of donations from individual persons.*

An endowment of this kind was received in 1992 from farmer Erik Rönnerberg of Fagerdal, Hammerdal. This donation now forms part of the Foundation's total assets and is managed with the Foundation's other assets. The value of the donation amounted at year-end 1995 to SEK 8.7m. The return on this donation is to be distributed by the Foundation *in the form of three-year postdoctoral research scholarships for young researchers at the Karolinska Institute (KI) in Stockholm, for scientific studies of ageing and age-related illnesses.*

Another donation was received from Erik Rönnerberg at the end of 1994. This new donation amounted to SEK 2.25m and is, like the previous one, to form part of the Foundation's overall assets and to be managed in conjunction with the other assets. The return on the new donation is to be distributed by the Foundation *in the form of three-year postdoctoral research scholarships for young researchers at the Karolinska Institute in Stockholm for scientific studies of illnesses during the early childhood years.*

According to a proposal from the Karolinska Institute's Faculty of Medicine, the Foundation's Board has decided that the scholarship amount is to be divided between Doctors of Medicine **Jessica Fryckstedt** and **Tina Granholm**. The diploma will be presented by Erik Rönnerberg at a ceremony in Östersund on 21 February 1996.

Nils-Eric Svensson's Fund was set up in 1993 and, under the Board's decision, is to last until the end of the year 2015. Accordingly, the Foundation is to make an annual allocation that permits SEK 150,000 in terms of 1994 monetary value to be distributed annually.

The purpose of Nils-Eric Svensson's Fund is, by awarding scholarships, to promote a reciprocal exchange of researchers in Europe. Nils-Eric Svensson's Fund aims, first, to enable young Swedish researchers with doctorates to travel to and spend brief periods in outstanding European research environments and, secondly, to allow young European researchers to engage in research at Swedish research institutions.

Thanks to the donations received by the Foundation over the past few years and managed there jointly with the basic endowment, the Foundation is approaching the status of similar major funds in such countries as Finland, France and Germany. This form of joint management, exemplified by these funds, promotes efficient asset management while professional allocation of grants for scientific research can be guaranteed. The Foundation would welcome further donations.

The Foundation's investment activities

The year 1995 was a good one for most capital managers. However, the year could have started better. The currency crisis in Mexico that had broken out in December 1994 continued with undiminished intensity when the new year started. When the Japanese city of Kobe was devastated by a powerful earthquake in mid-January, this had repercussions on the whole global economy. The fall of the Tokyo Stock Exchange also involved the collapse of the distinguished British merchant bank Barings.

Throughout the spring, the Swedish krona weakened while interest rates on bonds rose. At the end of April, however, this trend was reversed: the Swedish krona began to rise steadily and bond rates to fall. This trend then continued for the rest of the year.

After a slack beginning of the year, the Swedish stock market picked up and, by September, had risen by no less than 28%. A rising krona exchange rate and a generally anticipated economic slowdown, however, resulted in a relatively sharp fall in prices towards the end of the year. For the year as a whole, the Swedish stock market showed a rise of some 18%.

Financial administration

Many stock markets outside Sweden also showed good development in 1995, especially the American one, which in dollar terms rose by more than 40%. Translated into Swedish kronor, this share-price rise was around 30%. However, a world index for stock markets showed a price rise in terms of Swedish kronor of only some 6%.

During the year, the Foundation reduced its Swedish share portfolio, in particular. In terms of acquisition value, net sales amounted to SEK 270m. The bulk of sales took place in the autumn, when it was increasingly clear that the upward trend of prices to date could hardly last.

The bond portfolio, on the other hand, increased – by some SEK 195m – although certain sales took place at the end of the year.

During the year, the Foundation acquired another three residential properties in central Stockholm for an aggregate purchase price of SEK 52m.

In making these property acquisitions, the Foundation took over existing loans. The Foundation's loan debt therefore rose from SEK 183m at year-end 1994 to SEK 198m at year-end 1995.

Towards the end of 1995, prospects for the Foundation's share investments were looking highly uncertain. At the same time, Swedish short-term interest rates were relatively high. The Foundation therefore opted, as a general precautionary measure, to accumulate relatively high cash liquidity. By year-end 1995, the Foundation's bank assets amounted to SEK 644m, against SEK 275m at year-end 1994. Of the Foundation's total assets (valued at market value), the proportion of shares was 36% (45% at year-end 1994) and that of properties 11% (11%). The remainder, 53% (44%), consisted of Swedish interest-bearing assets.

Book profit

The outcome of the Foundation's investment activity is reflected in the income statement. The total of all income, including realised capital gains/losses on the sale of various securities, less current expenses, is termed "Book profit before grants for research" in the income statement. This book profit amounted to SEK 329m for 1995. For 1994, it was SEK 286m.

Partly as a result of the Foundation's growing holdings of interest-bearing assets, total interest income in 1995 considerably exceeded that of 1994 – SEK 179m against SEK 144m.

Share dividends in 1995 were also larger than those of 1994 – SEK 32m, against SEK 27m. The reduction in the share portfolio mentioned above resulted in substantial capital gains. In net terms, the realised capital gains in the securities portfolio amounted to SEK 154m. At the same time, the Foundation wrote down the value of two different shares whose value had been assessed as likely, in the long term, to fall short of their acquisition value. This write-down amounts to just over SEK 4m.

The Foundation's enlarged property holdings are reflected in larger income from properties. However, underlying the increase in income there is also a certain rise in rent levels. Property overheads were unusually high in 1994 owing to extensive renovation work. For 1995, these costs amounted to a smaller sum – SEK 16m, against SEK 24m in 1994.

With the exception of properties acquired during the financial year concerned, the Foundation has market valuation of all its properties performed. For 1995, this valuation resulted in a write-down of the book value of the site in Atlanta.

Of the year's book profit of SEK 329m, SEK 203m remains after disbursement of approved research grants. This amount was transferred in its entirety to the profit-equalization reserve.

Real profit

In principle, the Foundation has assets of three kinds that are exposed to changes in value: bonds, shares and property. Moreover, certain portions of the Foundation's assets are denominated in foreign currency. Accordingly, changes in exchange rates also affect the value of the Foundation's assets expressed in Swedish kronor.

The financial statements of an institution like the Foundation would be incomplete unless they were supplemented by changes in the value of assets – "Increase/decrease in unrealized value changes".

The net effect of these changes in unrealized capital gains/losses was, for 1995, an improvement of SEK 229m.

As a result of the falling interest rates during the year, the previous year's deficit value in the bond portfolio gave way to a surplus value (market value minus acquisition value). This improvement amounted to SEK 94m.

For the share portfolio, too, the previous year's deficit value was also succeeded by a surplus value, and this improvement amounted to SEK 122m.

The Foundation's properties show a surplus value (market value minus book value) of SEK 25m – an improvement of SEK 11m since 1994. One should, however, take into account here that, compared with the acquisition cost of a total of SEK 606m, the market value is still well below this figure, amounting as it does to SEK 494m.

As in previous years, the Foundation made an allocation in its real annual accounts for 1995 to equity capital, corresponding to the deterioration in monetary value. For 1995, this allocation was SEK 91m.

Thereafter, it was possible to transfer SEK 341m to the profit-equalization reserve in the real annual accounts. The surplus in this reserve thereby amounts to SEK 398m.

Performance

A summary consisting solely of financial items can be made from the income statements (and the various notes). These items have been grouped in a table by type of asset (see page 19).

The Foundation's *interest-bearing assets* yielded a profit of SEK 240m (including the unrealized increase in value) for 1995. A very rough calculation, in which the profit is divided by the average holding during the year (opening + closing value/2) shows a return of just over 14%.

Similarly, the Foundation's *share management* yielded a profit of SEK 290m. The same kind of very rough calculation as above shows a return of just over 17%.

For 1995, an overall net profit of SEK 13m is reported on the Foundation's properties. This represents an interest return of less than 3% only.

The financial result must be charged with financial costs in the form of interest expense and financial overheads.

The overall financial result for 1995 is shown in the table at SEK 569m. In terms of total opening capital, this represents an interest return of around 15.5%.

The financial result must cover research grants of SEK 126m, administrative expenses of SEK 11m and also the increase in the donation capital – SEK 91m – required for it to keep abreast of inflation. The financial result for 1995 is more than adequate for these purposes. The surplus amounts to SEK 341m.

Financial result (SEK '000)

Asset	Income/expense	1995
<i>Bank funds</i>	Interest income	22,432
	Unrealized exchange losses	-8,981
		11,026
<i>Commercial paper</i>	Interest income	145,498
<i>Bonds</i>	Interest income	24,809
	Realized gains	-
	Realized losses	-
	Change in unrealized value gains/losses	94,949
		289,733
<i>Shares and convertibles</i>	Dividends and interest payments	33,113
	Realized gains	165,457
	Realized losses	-27,211
	Write-down – shares	-4,353
	Change in unrealized value gains/losses	122,889
		289,895
<i>Properties and shares in properties</i>	Income	37,013
	Depreciation/write-down	-18,892
	Other expenses	-16,529
	Change in unrealized value gains/losses	11,270
		12,862
	Interest expense	-22,428
	Financial overheads	-1,260
		-23,688
Financial result		568,802

Income statement (SEK '000)

	Note	1995	1994
<i>Book profit</i>			
Interest income	1	179,394	144,609
Share dividends		32,675	27,465
Write-down – shares	2	-4,353	–
Income, properties	3	37,013	34,688
Interest expense, properties		-22,428	-19,934
Depreciation, properties	4	-6,892	-6,049
Write-down, properties	4	-12,000	–
Other expenses, properties		-16,529	-24,124
Realized exchange gains	5	190,266	174,357
Realized exchange losses	5	-27,211	-31,591
Unrealized exchange losses	5	-8,981	-2,451
Other income	6	494	390
Financial overheads	7	-1,260	-780
Administration expenses	8	-10,754	-9,907
<i>Book profit before award of research grants</i>		329,434	286,673
Approved research grants	9	-125,816	-89,131
<i>Book increase in equity capital after award of research grants</i>	21	203,618	197,542
Increase/decrease in unrealized gains/losses	10	229,108	-193,224
Allocation for maintenance of real value of donation capital	11, 21	-91,318	-78,581
<i>Real increase/decrease in equity capital after award of research grants</i>	21	341,408	-74,263

Balance sheet (SEK '000)

	Note	31 Dec. 1995		31 Dec. 1994	
		Book value	Market value	Book value	Market value
<i>Assets</i>					
<i>Current assets</i>					
Liquid funds		644,423	644,423	275,072	275,072
Commercial papers etc,	12	87,468	87,468	156,397	156,397
Accrued interest income		75,990	75,990	65,032	65,032
Prepaid expenses and other accrued income		576	576	486	486
Other claims	13	4,739	4,739	5,416	5,416
<i>Total current assets</i>		813,196	813,196	502,403	502,403
<i>Fixed assets</i>					
Bonds	14	1,446,158	1,531,861	1,251,630	1,242,384
Shares and convertibles	15	1,522,026	1,609,306	1,804,571	1,768,962
Shares in property companies	16	49,370	45,747	61,370	51,353
Property	16, 17	420,459	449,130	375,455	399,250
Equipment	18	1,338	1,338	1,505	1,505
<i>Total fixed assets</i>		3,439,351	3,637,382	3,494,531	3,463,454
<i>Total assets</i>		4,252,547	4,450,578	3,996,934	3,965,857
<i>Liabilities and equity capital</i>					
<i>Liabilities</i>					
<i>Current liabilities</i>					
Trade creditors		2,927	2,927	2,223	2,223
Accrued expenses and deferred income	19	13,605	13,605	12,928	12,928
Other current liabilities	20	2,896	2,896	624	624
Grants approved but not yet disbursed		89,340	89,340	56,340	56,340
<i>Total current liabilities</i>		108,768	108,768	72,115	72,115
<i>Long-term liabilities</i>					
Secured loans		198,826	198,826	183,484	183,484
<i>Total long-term liabilities</i>		198,826	198,826	183,484	183,484
<i>Total liabilities</i>		307,594	307,594	255,599	255,599
<i>Equity capital</i>	21				
Donation capital		3,009,207	–	3,009,207	–
Donation capital indexed upwards		–	3,744,032	–	3,652,714
Profit-equalization reserve		935,746	398,952	732,128	57,544
<i>Total equity capital</i>		3,944,953	4,142,984	3,741,335	3,710,258
<i>Total liabilities and equity capital</i>		4,252,547	4,450,578	3,996,934	3,965,857

Balance sheet (SEK '000), contd.

Pledged assets	31 Dec. 1995		31 Dec. 1994	
	Book value	Market value	Book value	Market value
<i>Pledged assets</i>				
Property mortgages	211,916		195,319	
<i>Contingent liabilities</i>				
Pension obligation	2,590		2,553	
Grants approved to be disbursed from return in the year ahead	87,153		16,200	

Funds statement (SEK '000)

	1995	1994
Funds provided		
Funds provided internally from the year's operations (<i>see specification below</i>)	352,679	292,722
Decrease in current assets (<i>excl. liquid funds</i>)	58,558	63,254
Increase in current liabilities	36,653	28,169
Donations and other contributions	—	1,502,303
Increase in long-term liabilities	15,342	37,980
Total funds provided	463,232	1,924,428
Funds utilized		
Investments in land, buildings, machinery and equipment	51,729	56,354
Investments in shares and participations	-83,664	1,637,943
Research grants approved	125,816	89,131
Total funds utilized	93,881	1,783,428
Funds provided less funds utilized (= change in liquid funds)	369,351	141,000
Specification of funds provided internally from the year's operations		
Book profit before research grants	329,434	286,673
+ depreciation and write-down charged to this profit	23,245	6,049
Funds provided internally from this year's operation	352,679	292,722

Notes (figures in SEK '000)

Note 1. Interest income

	1995	1994
Bank	22,432	16,646
Commercial paper	11,026	13,133
Bonds	145,498	114,232
Convertibles	438	598
	179,394	144,609

Note 2. Write-down – shares

Two foreign shares, Great American Recreation and Paris Development, were written down by SEK 1,377K and SEK 2,976K respectively, or a total of SEK 4,353K, since it was considered that these were subject to a lasting decline in value.

Note 3. Income – properties

Of property income, SEK 1,310K constitutes an estimated internal rental of the Foundation's own premises.
See also Note 8.

Note 4. Depreciation and write-down – properties

Depreciation according to plan is based on acquisition values and spread over the estimated economic life. Depreciation on buildings is effected at 2% annually.

The value of the Foundation's site in Atlanta, USA (Peachtree) was written down by SEK 12m in order to bring it more into line with the assessed market value.

Note 5. Exchange gains/losses

Realized	1995		1994	
	Gains	Losses	Gains	Losses
Bonds	24,809	—	17,986	3,624
Shares and convertibles	165,457	27,211	156,371	27,967
	190,266	27,211	174,357	31,591
Unrealized				
Liquid funds (foreign exchange)	—	8,981	—	2,451
	—	8,981	—	2,451

Note 6. Other income

	1995	1994
Income from publications	46	11
Unutilized grants	448	280
Miscellaneous	—	99
	494	390

Note 7. Financial overheads

	1995	1994
Safe-custody charge	917	440
Stock-exchange and Reuter screens	343	340
	1,260	780

Note 8. Administrative expenses

	1995	1994
Salaries and other remuneration to		
– the Board and Managing Director	1,669	1,590
– other staff	2,738	2,595
Occupational pensions	920	799
Payroll costs	1,532	1,259
Travel and allowances, office and Board	642	442
Audit and auditing consultation	272	307
Other consultancy services	99	261
Costs of premises	1,320	1,218
Consumable equipment	490	472
Depreciation of equipment	365	199
Miscellaneous	707	765
	10,754	9,907
The average number of employees during the year was:		
Women	6.0	5.5
Men	3.0	3.0
Total	9.0	8.5

Note 9. Grants for research

	1995	1994
Grants from the Bank of Sweden's donation	71,345	69,398
Grants from the Nils-Eric Svensson Fund	154	150
Grants from the humanities and social science donation	53,976	19,330
Grants from Erik Rönnerberg's donation for age-related illnesses	265	253
Grants from Erik Rönnerberg's donation for illnesses during the early childhood years	76	—
	125,816	89,131

Note 10. Change in unrealized exchange gains/losses

	1995		1994		Change
	Gains	Losses	Gains	Losses	
Bonds	85,703	—	—	9,246	94,949
Shares and convertibles	87,280	—	—	35,609	122,889
Property and shares in property	25,048	—	13,778	—	11,270
	198,031	—	13,778	44,855	229,108

Note 11. Allocation for maintenance of real value of donation capital

The average value of the consumer price index in 1995 was 254.8. The corresponding value of the index for 1994 was 248.5. Between 1994 and 1995, the consumer price index thus rose by 2.5%.

The allocation for maintenance of the real value of the donation capital is, accordingly, $0.025 \times 3,652,714 = \text{SEK } 91,318\text{K}$.

See also Note 21.

Note 12. Commercial paper etc

	Book value	Nominal value
Commercial paper	37,416	40,000
Mortgage institutions' subordinated loans in the form of Floating-Rate-Note loans (FRN)	50,052	50,000
	87,468	90,000

At year-end 1994, the Foundation held short-term commercial paper of a book value of SEK 156,397K (nominal value SEK 160,000K).

In the balance sheet, the book (= acquisition) value is also reported in the column for market value.

Note 13. Other claims

	1995	1994
Rental claims etc	4,437	3,259
Deposit on property	–	1,800
VAT on properties	302	357
	4,739	5,416

Note 14. Bonds

Maturity date	Nominal value	Book value	Market value
1996	313,150	314,465	315,482
1997	140,000	139,010	141,789
1998	100,000	106,594	102,369
1999	642,000	580,751	625,333
2000	80,000	76,869	84,462
2001	40,000	39,764	43,413
2009	160,000	136,691	165,469
2014	120,000	52,014	53,544
	1,595,150	1,446,158	1,531,861

At year-end 1994, the Foundation held bonds of a book value of SEK 1,251,630K (nominal value SEK 1,320,000K).

Note 15. Shares and convertibles

Share	Number	Book value	Market value	Currency unit
AGA A	796,400	54,372	72,472	SEK
AGA B	105,000	8,948	9,555	SEK
ASEA A	228,819	147,049	147,359	SEK
ASEA B	32,500	20,717	20,930	SEK
Assidomän	58,400	9,137	8,439	SEK
Astra A	852,000	153,870	225,354	SEK
Bergman & Beving	256,092	40,087	47,633	SEK
BT	70,000	5,390	5,040	SEK
Catena	199,600	12,812	10,180	SEK
Cloetta	68,900	7,249	6,408	SEK
Elekta	10,600	2,900	2,809	SEK
Ericsson	922,281	82,229	119,435	SEK
Esselte A	10,600	966	1,049	SEK
Esselte B	225,700	25,400	22,344	SEK
Euroc A	87,500	11,576	15,400	SEK
Euroc B	43,000	6,149	7,267	SEK
Getinge	146,666	39,226	44,073	SEK

Note 15 (contd.)

Share	Number	Book value	Market value	Currency unit
Graningeverken	645,750	72,624	78,782	SEK
JP A	269,000	9,502	7,586	SEK
JP B	481,000	17,036	13,468	SEK
Nordictel	302,900	25,194	19,689	SEK
Perstorp	200,000	54,782	57,000	SEK
Sandvik A	224,946	26,546	26,094	SEK
Sandvik B	314,185	37,324	36,445	SEK
SCA A	55,958	7,834	5,876	SEK
SCA B	636,477	85,371	65,557	SEK
Skanska	376,809	68,327	85,536	SEK

Total Swedish shares **1,032,616** **1,161,780** **SEK**

Foreign shares	Number	Book value	Market value	Currency unit
Arvin Industries	42,700	1,330	705	USD
Abbot Labs	75,000	2,900	3,122	USD
Best Buy	15,000	518	244	USD
Eastman C	41,000	2,491	2,557	USD
Fed,Dep,Stores	76,000	1,986	2,071	USD
Gannet	27,000	1,477	1,657	USD
Great American	850	–	–	USD
Hillenbrand	95,000	2,862	3,218	USD
Home Depot	36,000	1,490	1,719	USD
Home Shopping	230,000	2,008	2,070	USD
McDonalds	70,000	1,963	3,159	USD
Motorola	18,000	1,044	1,026	USD
Quest	134,280	2,056	2,299	USD
R P Scherer	24,000	991	1,179	USD
Sprint	86,000	2,672	3,408	USD
Time Warner	50,000	2,048	1,894	USD
Toys R Us	50,000	1,610	1,088	USD
Danske Bank	31,000	12,012	11,873	DKK
Tele Danmark	12,000	3,720	3,636	DKK
Amer	16,500	2,109	1,120	FIM
Enzo	170,000	6,975	4,930	FIM
Huhtamäki	22,000	4,114	2,288	FIM
Instrumentarium A	14,000	1,376	1,582	FIM
Instrumentarium B	24,000	2,352	2,688	FIM
Kymmene	50,000	6,550	5,750	FIM
Nokia	10,000	1,606	1,680	FIM
Pohjola	42,500	3,502	2,380	FIM
Repola	111,000	12,511	9,102	FIM

Note 15 (contd.)

<i>Foreign shares</i>	<i>Number</i>	<i>Book value</i>	<i>Market value</i>	<i>Currency unit</i>
Burma Castrol	101,204	86,800	94,525	GBP
Glaxo	84,917	55,387	77,699	GBP
Paris Development	50,000	1,800	1,800	FRF
Air Liquide	6,600	4,909	5,353	FRF
Legris	8,500	4,607	1,355	FRF
Pinault	4,700	5,029	4,592	FRF
Schneider	27,000	6,013	4,520	FRF
Leifheit	30,000	1,993	1,890	DEM
Merck	45,000	2,473	2,633	DEM
KPN	21,250	1,169	1,239	NLG
SMH	5,000	3,802	3,450	CHF
AB Far East	37,636	4,985	6,234	USD
Fleming E O	114,912	2,005	2,344	USD
India Fund	135,000	1,924	1,198	USD
AB Japan	255,964	25,000	18,752	SEK
Total foreign shares		488,399	446,301	SEK
<i>Convertibles</i>	<i>Nominal value</i>	<i>Book value</i>	<i>Market value</i>	<i>Currency unit</i>
AGA	586,500	1,011	1,226	SEK
Total Swedish shares and convertibles		1,033,627	1,163,005	SEK
Total shares and convertibles		1,522,026	1,609,306	SEK

Note 16. Properties and shares in property companies

	<i>Foundations share</i>	<i>Book value</i>	<i>Market value</i>
<i>Shares in property companies</i>			
917 Peachtree, LLC, USA	40 %	15,801	14,586
Reindeer Realty, LP, USA	90 %	33,569	31,161
Subtotal		49,370	45,747
<i>Properties</i>			
Styrpinnen 23, Stockholm	100 %	45,601	63,000
Claus Mortensen 24, Malmö	100 %	84,897	80,000
Adam och Eva 17, Stockholm	50 %	135,941	130,000
Brännaren 7, Stockholm	100 %	17,414	21,000
Kampsången 4, Stockholm	100 %	11,900	13,000
Sländan 2, Stockholm	100 %	9,049	15,000
Trädgården 2, Stockholm	100 %	11,520	21,000
Rekryten 6, Stockholm	100 %	27,963	30,000
Snöklockan 1, Stockholm	100 %	24,865	25,000
Jasminen 4, Stockholm	100 %	17,067	17,000
Apelträdet 5, Stockholm	100 %	15,702	15,630
Hjorten 17, Stockholm	100 %	18,540	18,500
Subtotal		420,459	449,130
Total		469,829	494,877

Properties acquired in 1995 have been assigned a market value equal to the acquisition value. For other properties and shares in property companies, market values are based on external valuations performed by reputable valuation firms.

Note 17. Properties

	1995	1994
Acquisition value, buildings	352,025	315,211
Accumulated depreciation	-21,186	-14,294
Accumulated write-down, buildings	-58,258	-58,258
Buildings, book value	272,581	242,659
Acquisition value, land	192,620	177,538
Accumulated write-down, land	-44,742	-44,742
Land, book value	147,878	132,796
Total book value	420,459	375,455
<i>Tax-assessment value</i>		
Buildings	185,545	154,918
Land	69,601	63,627
Total	255,146	218,545

The market values of the properties are shown in Note 16. See also Note 4.

Note 18. Equipment

For equipment, a depreciation plan of 20% p.a. is applied.

Note 19. Accrued expenses and deferred income

	1995	1994
Payroll costs	208	187
Holidays earned in advance but not utilized	126	93
Special payroll tax on pension-insurance premiums	128	97
Accrued interest on secured loans	1,892	1,821
Prepaid rental income	9,128	7,630
Miscellaneous, properties	1,407	2,901
Miscellaneous accrued expenses	716	199
	13,605	12,928

Note 20. Other current liabilities

	1995	1994
Employees' tax at source	235	228
Property tax	552	396
Management of funds from the Working Life Fund	2,109	-
	2,896	624

Note 21. Equity capital

	Donation capital	Profit-equalization reserve	Total equity capital
<i>Nominal capital</i>			
Equity capital, 31 Dec. 1994	3,009,207	732,128	3,741,335
Allocation for the year	-	203,618	203,618
Equity capital, 31 Dec. 1995	3,009,207	935,746	3,944,953
<i>Real capital</i>			
Equity capital, 31 Dec. 1994	3,652,714	57,544	3,710,258
Allocation for maintenance of the real value of donation capital (see Note 11)	91,318	-	91,318
Real increase of equity capital	-	341,408	341,408
Equity capital, 31 Dec. 1995	3,744,032	398,952	4,142,984

Donations

The funds administered by the Bank of Sweden Tercentenary Fund are derived from five different donations:

- Donation from the Bank of Sweden to promote and support scientific research
- Nils-Eric Svensson's Fund
- Humanities and Social Science donation
- Erik Rönnerberg's donation for research on ageing and age-related illnesses
- Erik Rönnerberg's donation for research on illnesses during the early childhood years.

(For a more complete description of the purposes of the various donations, please refer to the section on "Activities to support research".)

All the funds donated to the Bank of Sweden Tercentenary Foundation are managed jointly. The yields of the various donations are, however, destined for different purposes. The Foundation's total yield on managed funds must therefore be split up between the different donations.

At the beginning of 1995, the market values of the various donations were as follows:

1. Bank of Sweden's donation, including Nils-Eric Svensson's Fund **SEK 2,181,701K** (58.8019%)
2. Humanities and Social Science Donation **SEK 1,518,517K** (40.9275%)
3. Erik Rönnerberg's donation for research on age-related illnesses **SEK 7,790K** (0.2100%)
4. Erik Rönnerberg's donation for research on illnesses during the early childhood years **SEK 2,250K** (0.0606%)

The Bank of Sweden Tercentenary Fund's total return in 1995 (book result + increase/decrease in unrealized gains/losses = SEK 329,434K + 229,108K = 558,542K) is to be allocated proportionately to the various donations.

1. *The Bank of Sweden's donation, including Nils-Eric Svensson's Fund*

	SEK '000
Opening value	2,181,701
Share of total yield for the year	328,434
Grants for the year	-71,499

Market value, 31 Dec. 1995 **2,438,636**

The grants from Nils-Eric Svensson's Fund have no direct link to the return on managed funds. The Board of the Bank of Sweden Tercentenary Fund has undertaken to ensure that the grants made each year can amount to a particular sum – which for 1995 is SEK 154,000K. The donation is to be regarded as used up by year-end 2015. In this summary, Nils-Eric Svensson's Fund has therefore been combined with the Bank of Sweden's donation.

2. *Humanities and Social Science donation*

	SEK '000
Opening value	1,518,517
Share of total yield for the year	228,597
Grants for the year	-53,976

Market value, 31 Dec. 1995 **1,693,138**

3. *Erik Rönnberg's donation for research on ageing and age-related illnesses*

	SEK '000
Opening value	7,790
Share of total yield for the year	1,173
Grants for the year	-265

Market value, 31 Dec. 1995 **8,698**

4. *Erik Rönnberg's donation for research on illnesses during the early childhood years*

	SEK '000
Opening value	2,250
Share of total yield for the year	338
Grants for the year	-76

Market value, 31 Dec. 1995 **2,512**

Stockholm, 7 February 1996

Inge Jonsson <i>Chairman</i>	Jan Björkman <i>Vice chairman</i>	Elving Andersson
Jan Belfrage	Mona Berglund Nilsson	Boel Berner
Lars Engwall	Gunnel Gustafsson	Björn Kaaling
Bertil Persson	Åke Smids	Per Unckel
Dan Brändström <i>Managing Director</i>		

Audit report

We have examined the annual report, the accounting records and the administration by the Board of Trustees and the Managing Director for the year 1995. Our examination was conducted in accordance with generally accepted auditing standards.

The examination did not call for any criticism of the annual report, the accounting records or the administration of the Foundation's business by the Board of Directors and Managing Director. In our view, the accounts are correct and were prepared in accordance with generally accepted accounting principles.

Stockholm, 8 February 1996

Ernst & Young AB

Per Björngård

Authorized Public Accountant

Sweden was one of the five European countries that escaped war and occupation. Why? Was it thanks to the coalition government? How should we assess that set of gentlemen in late middle age? Were they a band of opportunists, lacking moral principles? Or were they a collection of skilled practitioners of *realpolitik*? Where should we place them? It depends.

Skilful *Realpolitik* or Unprincipled Opportunism?

The Coalition Government's Foreign Policy in
Debate and Research
Lecture in the Riksdag, 9 May 1995
Stig Ekman, Department of History,
University of Stockholm,
S-106 91 Stockholm, Sweden

had managed to avoid war and occupation to date. The opinion poll yielded the following results. Because of the coalition government's policy, thought 50%; because of the belligerents or Sweden's geographical position, said 18%. Let me note in passing that it was Sweden's military preparedness that saved us from the war; this answer was given by 7%. Or it was attributed to the king: 8% cited Gustaf V. Chance, said 11%, and 6% settled for God. Leaving the divine contribution aside, it may be said of the King's that throughout the war, there was a frictionless relationship between monarch and government. But it is still an unanswered question whether, if the King had threatened to abdicate, the government would have decided to reject the Germans' demand that Sweden allow the transit of an armed infantry division from Oslo via Charlottenberg, Hallsberg, Boden and Haparanda to Finland.

At any rate, the Prime Minister interpreted the King's unclear mumbling as an abdication threat and used it as a weapon to prevent the coalition government from breaking up. This was the most severe government crisis during the war. The government agreed, but with the reservation that this was a once-only concession. This agreement was a flagrant contravention of the rules of neutrality. Nor was it possible to keep it secret. Many people perceived it as meaning that Sweden had lost its national independence. For others, this consent was self-evident out of consideration for Finland, which in 1941 entered the war as Nazi Germany's comrade-in-arms. The strongly German-oriented deputy chief of the defence staff, Colonel Samuel Åkerhielm, even hoped that the transit of the 163rd Division, Engelbrecht (13,712 men, divided between 105 transports) would result in a Russian protest or that the Russians would immediately bomb the trains. Accordingly, Sweden would join the German crusade against Bolshevism. As for joining the

It depends mainly on how we judge the government's handling of relations with Nazi Germany during Hitler's years of victory. Judgements have varied, both during the war and in the half-century that has elapsed since peace was concluded. Some have consigned the coalition government to the abyss of moral iniquity. Others have adjudged its performance excellent.

What did the Swedes think? In April 1945 Gallup posed the question of why Sweden



Per Edvin Sköld – the authoritative and competent Minister of Defence in the coalition government. Illustration from "1939. A report from the Year when Europe was set on Fire" (in Swedish), by Gustaf von Platen & Tecknar Anders, Stockholm 1989, p. 13.

war, "the question is whether the latter would not be the best thing that could happen," Åkerhielm wrote in his diary on 26 June.

It may be said of Sweden's military defence forces that the more the external threat subsided during the war, the stronger our military strength became. The great endeavour of building up strong, modern defences took several years. It was a matter of training. It also involved war matériel: aircraft, destroyers, tanks. Swedish military defences during the initial, critical years of the second world war were weak, poorly equipped and inadequately trained.

But the peacekeeping effect of Swedish military defences was a slogan in national propaganda.

Inside assessments, especially from the military leadership, during Hitler's years of victory told another story: if Germany attacked Sweden, we had not a chance. In February 1942, when a German blitz was feared in the middle of the bitterly cold winter, Supreme Commander General Thörnell's assessment was so downhearted that Wigforss, the Minister of Finance, considered Thörnell a defeatist, who should therefore be dismissed. The important point here is that Swedish patriotic propaganda to strengthen the popular defensive will in the initial, critical years of the war gave the impression of military strength that existed on paper only – not in reality. Let me give an example. On 30 October 1939, the armoured

ship Åran ("Honour"), built in 1902, was for the first time for many years to test-fire its big guns with sharp ammunition. Åran fired 11 shots, and then had to seek an emergency harbour.

Then there were the reserve soldiers in the provinces of Sweden... Army Commander General Ivar Holmqvist revealed during the war that Sweden had the best soldier material in the world. And a Swedish general with pro-Nazi sympathies, Rickman von der Lancken, considered that Sweden had a superior secret weapon at its disposal: the warrior spirit of Charles XII. It was as if that monarch had risen from the dead. It should be pointed out that, in military pro-Nazi circles, Adolf Hitler and Charles XII were regarded as kindred spirits. When Hitler had his 50th birthday on 20 April 1939 he was presented, by senior army officers, with a bronze statuette representing Charles XII. And a devoted address was made in which Hitler and Charles XII were both proclaimed saviours of Europe from the barbarity of the East.

There is therefore a clear connection between the concessions to Germany and knowledge of Sweden's poor defences. Of this, cabinet ministers and members of the Riksdag – those who knew – spoke very discreetly indeed. But it was all right as long as the truth was hushed up.

Thus, Knut Petersson at the secret Riksdag session of 16 June 1942 was able to declare that there was only one valid excuse for the deviations from the path of righteousness: "our military weakness". Georg Branting at a similarly secret session on 25 June 1941 cavilled at the decision to assent to the transit of the Engelbrecht division. Branting's view was that the decision meant that right-wing leader Gösta Bagge's famous "Swedish hedgehog" of 1 May 1940 had metamorphosed into a hare.

The belligerents now had no serious qualms about testing the sharpness of this hedgehog's prickles. In any case, after the Winter War and 9 April 1940, the belligerents had a vested interest in keeping Sweden out of the war. Nazi Germany had no rational motives for attacking Sweden. With one important exception, the government assented to the most important and weighty German demands and wishes where Sweden was concerned. It was rational and cost-effective for Germany not to waste ammunition on Sweden, which was its important trading partner. The German war industry would not, for example, be served by the iron-ore mines being blown sky-high. In fact, Sweden fitted well into the German wartime economy: export and import took place to the two countries' mutual satisfaction. Admittedly, there were German plans to attack Sweden. But they were mere plans. I note what Goebbels wrote in his diary on 15 April 1942: "The Swedes are determined to meet with armed force any invader attacking their territory. It would no doubt have been good if we had collected Sweden too during our action in the north (1940). After all, this state has no right to exist as a nation at all any longer." But these plans remained nothing but, quite simply, plans – in the event that... The German military isolation of Sweden was itself a factor promoting peace.

Typically, the greatest risk of war for us was that of a German preventive war against Sweden in the event of a British invasion of Norway. This particular scenario was a Hitlerian nightmare. For Sweden's part, it was feared that the nightmare might come true in the winter of 1942. Energetic moves were made – even the King was used – to assure Hitler that Sweden would not make common cause with the western powers if the British landed in Norway. This was the "February crisis" of 1942. And, finally, it is difficult to pinpoint which risks of war, if any, might have underlain the periodically hateful German chorus of lamentation in the Swedish press. The government perceived Adolf Hitler as an erratic, irrational factor, hard to interpret and a curb on foreign-policy room for manoeuvre in the Ministry for Foreign Affairs.

As the war developed the Allies, for their part, had no rational reasons for engaging Sweden militarily – until the final phase of the war. Then, Winston Churchill worked energetically to bring Sweden in. His arguments were not military, but moral. On 19 April 1945 the Prime Minister wrote to the chiefs of staff that it was now Sweden's last chance to save its honour. The distinguishing feature of Swedish policy in two world wars against Germany was, he said, calculating selfishness. This was not good enough any longer. The coalition government actually agreed to the

Allies' request for joint military staff negotiations. The government gave its assent to this on 30 April. Understandably enough, nothing became of it all since Hitler happened to commit suicide on that particular day.

For free Norway as a belligerent nation, a protected Sweden was a boon. As a refuge: the number of Norwegian refugees at the end of the war was 43,000. As a support area for the resistance movement, too. The Norwegian government-in-exile in London wanted Sweden to remain outside the war while, at the same time, criticising the concession policy of the coalition government with indignation and even rancour. There are bitterly rancorous letters from Johan Nygaardsvold from 1941, the content of which was intended for the ears of Per Albin Hansson, the Swedish Prime Minister. Echoes of these sentiments linger on today. And finally, for the belligerent countries' diplomats, agents and spies it was a boon to have a peaceful Stockholm as an international centre for information and contacts. Or, as American historian Louis Snyder put it, Sweden made itself indispensable to both sides. The cornerstone of the coalition government's foreign policy was a policy of neutrality that was modified according to circumstances and the war situation. What name shall we use for the coalition government's relationship with Nazi Germany? This name question is controversial. A policy of negotiation? Of adaptation? Of cooperation – or rather, collaboration, to use the international term. And this begs the question of whether Sweden was, in practice, indirectly belligerent on the German side. It depends. It depends on how we assess the content and consequences of the concessions accepted by the coalition government. It depends on the disposition of the coalition government.

But first, let us rapidly survey the foremost concessions, in order to establish some kind of preliminary understanding of posterity's judgement of the coalition government.

There were, after all, concessions of various kinds: military, commercial, political and ideological/moral. One political concession to Germany was, for example, that Sweden had no diplomatic representation with the Norwegian government-in-exile in London until the autumn of 1943. In terms of trade policy, we think of the iron-ore exports to Germany. These iron-ore exports have, in fact, hardly provoked any moral convulsions even among the government's angriest critics. However, there is no getting away from the fact that



In his trilogy of novels about the Krilon group, Eyvind Johnson scourged the coalition government's concession policy. Photo: Pressens bild

the export of iron ore and ball bearings means that, in formal terms, neutral Sweden made an active contribution to Nazi Germany's warfare. The government did not, however, consider that trade with Germany was a problem of neutrality. The main principle of Swedish wartime trade policy had, ever since the outbreak of war, been that trade with belligerent parties should, if possible, proceed on a normal scale, at the prewar level.

It is more problematical to decide how we should regard the export of ball bearings to Nazi Germany during the last years of the war. Economic historian Martin Fritz was, in 1975, able to reveal how the Ministry for Foreign Affairs in Stockholm pulled the wool over the Allies' eyes by specifying incorrect product designations for some of this ball-bearing export to Germany. Ball-bearing machines, for example, were called "universal machines". There is no evidence as to whether the government approved this practice: more research is required. This hardly flattering Swedish practice should best be characterised as "business as usual".

As for the military concessions, these were on land, in the air and at sea.

Sweden was, in practice, a transit country for the German military. Transit of war matériel; transport of two million German soldiers. Of soldiers and war matériel in 1940-43, from Germany via Sweden to Norway and back. The "horse-shoe transport" from Trondheim via Storlien/the Swedish-Norwegian border to Narvik. Military rail transport from Norway and Germany to Finland. And then there were the aviation concessions: German military aircraft were permitted to cross Swedish airspace according to generous Swedish consent, under the excessively innocent name of "courier planes". In practice, these were provisions granting exemption from the neutrality regulations. There were scandals in Sweden even during the war. Less known to contemporaries and posterity have been our concessions at sea. German ships with troops and war matériel were permitted to pass through inner Swedish territorial waters. These merchant ships were escorted until September 1942 by Swedish warships, whose oil requirements were met through imports from America via cartel-ship traffic. German warships, too, were able to use the otherwise prohibited inner Swedish territorial waters, and this meant a flagrant contravention of the neutrality regulations. The dilemma was solved by a Swedish-German agreement to the effect that the German vessel should raise its emergency distress signal when it entered inner Swedish waters. There was close co-operation between the German and Swedish navies, which also laid mines together in the Baltic. However, on 9 July 1941 things went wrong. Owing to misinformation, Swedish mines south of Öland sent three German auxiliary minelaying cruisers to the bottom of the sea. Or, as historian Alf Johansson maliciously put it: "This occurrence appears to have been Sweden's biggest contribution, in terms of direct opposition to German military power during the second world war."

Few concessions to Nazi Germany have appeared as odious as the agreement on transit of German soldiers and war material through Sweden to Norway. The German trains have been perceived as a humiliating burden on Sweden's position during the war – a millstone round the government's neck, however much we emphasise that the decision of 18 June 1940 was taken out of necessity, under the influence of France's fall, under the impression that Hitler had perhaps already won the war, and under the impression that if the government refused Sweden would



The agreement on transit of German soldiers and war matériel in action: German soldiers taking a break on the railway somewhere in Sweden. Photo: Archives and library of the Swedish Labour Movement, Stockholm

be in danger of a German attack. In his diary that day, the prime minister made a note that has become famous: "So our neutrality line, held dear and strictly adhered to, is broken owing to the realisation of how unreasonable it is, in the present situation, to run the risk of war." But now the government opted to maintain the façade, claiming that the agreement on transit of German soldiers and war matériel was no deviation from virtuous neutrality. The transit agreement was presented virtually as a transport issue. It was to be nearly three years before the government openly admitted that the agreement was an encumbrance. The whole matter was not improved by the fact that Per Albin Hansson's supporter in the second chamber, chief editor Allan Vougt, wrote a leader in *Arbetet* on 10 July 1940 containing the unfortunate assertion that "surely not many people need be irritated by the German trains, since they were to pass at night" – a phrase that rapidly became notorious. However, in the advisory council on foreign affairs on 23 June 1941, Allan Vougt wanted Sweden to decline permission for the transit of the Engelbrecht division.

This was the very problem for the coalition government. The lack of openness vis-à-vis domestic public opinion, towards the Swedish people. Playing down, making light of the matter – and, as in the Prime Minister's case, publicly adopting a stance, a valuation, that conflicted with what he really thought and felt. That was a strain.

This brings us to the category of concessions that, in my opinion, were the most serious and, for one's assessment of the coalition government, the most debatable and hardest to defend: the ideological and moral concessions. In general, these related to measures (many of which had already been undertaken in the Winter War) that restricted democratic freedoms and rights. There was a repressive policy of

freedom of the press that entailed threats and admonitions, self-censorship, transport bans, press-law prosecutions, confiscations of newspapers without trial, a censorship law in the event of war and the risk of war, opinion registration, opening of letters, telephone-tapping and the secret work of the security police. And then there was classification as an official secret, to which the civil and military bureaucracy had round-the-clock recourse. This – except for everything that was burnt – gave rise to many thousands of classified volumes that, at length, became accessible for research in postwar Sweden. But a great deal still remains secret.

In the victorious years of Nazism, the government's measures aimed at supervising and suppressing freedom of expression entailed direct and indirect concessions to Berlin. Berlin knew that public opinion and most of the Swedish press were anti-Nazi. What was to be done? German historians have shown that the approach of bringing about mental adaptation – *Gesinnungsneutralität* – was deliberate Nazi strategy during the war. On 18 February 1940, Goebbels declared at a secret meeting that the neutral states would not be threatened by the gun but, instead, subjugated by demands for political, military and publicistic neutrality. Adapting, and not expressing negative opinions about Nazi Germany. And, indeed, the government strove to try and silence the vociferous part of Swedish anti-Nazi press opinion. The Ministry for Foreign Affairs and the Ministry of Justice learnt to confiscate an offending issue of a newspaper even before the German minister had arrived on the spot. And of course the greater part of the press backed the government's intentions of a cautious attitude towards the south. There were, accordingly, measures that promoted mental adaptation – but there was no muzzle that more than temporarily stopped the anti-Nazi voices.

That muzzle was, instead, placed by the coalition government on itself. On 23 March 1941 the Minister of Defence, Per Edvin Sköld, declared publicly that the foreign-policy situation prevented Sweden from "having an interest in a victory on the part of any belligerent country". There are similar statements by Foreign Minister Günther and other ministers from the years in which Hitler's sun was at its zenith. And more than that was said: there is testimony to the effect that certain cabinet ministers – or officials close to them – in the critical years believed that Germany would probably win the war. Unless Hitler had, in fact, already won it...

This positive mumbling about Sweden's task in a new Europe – this was mental adaptation in Germany's favour. Besides the agreement on transit of soldiers and war matériel, it is on concessions in the ideological-moral sphere that critics of the coalition government, past and present, have concentrated. Their foremost representative hurled at the coalition government such abusive epithets as "stuck-up bunglers", "super-donkeys", "parasites" and Sweden's most useless government ever. "And then there is this nauseating mendacity that shrouds the whole of official Sweden in its mist. How sick one feels to hear these cabinet ministers standing and chiming in about solidarity with Norway while, at the same time, supporting the Germans in their attempts to suppress" Norway. The man who held the pen was Torgny Segerstedt, chief editor of *Handelstidningen* in Gothenburg. In this newspaper, one could read that the government's policy meant a subversive adaptation to Nazism. Sweden had become a German vassal state. The struggle for Swedish national independence required definite standpoints against Germany to be taken.

Sweden had to take sides in the conflict between democracy and dictatorship. The government's foreign policy should not be allowed to impede an Allied victory. But, instead, it was "Germanness" that was the government's political lodestar. The government's policy was a moral disaster. That was the message.

Segerstedt wrote extremely aggressive and rancorous articles against Nazism, against the government and against the concession policy – but for freedom of expression, for Great Britain and for oppressed Norway. He was beloved of the Norwegian resistance, and hated in Berlin. Segerstedt was at the top of the list of Swedes to be incarcerated in the event of German occupation.

To many people, Segerstedt's message was a beacon illuminating the spiritual darkness of Sweden. To others, he was a risk factor for war, disloyal to the coalition government and to national unity. The Prime Minister wrote in his diary that it was unreasonable for Sweden to expose itself to a risk of war owing to Segerstedt's writings. Even the King tried to get Segerstedt to blunt his sharp pen. The King's final remark from the audience of autumn 1940 has been preserved for posterity: "Remember, if there is a war it will be your fault."

There were other citizens who wrote or worked in the spirit of Segerstedt. Karl Gerhard referred to "Segerstedters" – they were in a minority, but clamorous. There were a few liberal and social democratic newspapers: *Eskilstuna Kuriren*, *WLT*, *Aftontidningen*, *Socialdemokraten* as long as Zäta Höglund was allowed to be chief editor, *Trots Allt!* with Ture Nerman and *Förbundet Kämpande Demokrati*, *Samfundet Nordens Frihet*, *Tisdagsklubben*. The syndicalists should not be forgotten. There were journalists, several members of the Riksdag, artists, intellectuals and many writers.

Thus, Segerstedt fought for an ideological alternative to the government's foreign policy. There should be no concessions to the Nazis. Sweden must, he said, struggle up from the downhill slope of adaptation to the Nazis. The government must take a stand in the raging struggle between good and evil.

Segerstedt's line also recurs in the opus that constitutes the most devastating attack of the years of military preparedness on the coalition government's foreign policy and its moral and ideological consequences. I am thinking of Eyvind Johnson's novel trilogy on the Krilon group from 1941-43. This set of novels is a demonstration of how mental neutrality results in the government, as well as



Sweden's anti-Nazi number one – Professor Torgny Segerstedt, chief editor of *Göteborgs Handels- och Sjöfartstidning*.
Photo: Pressens Bild

ordinary citizens, being transformed – or running the risk of being transformed – into morally unprincipled fellow-travellers. In Krilon the number one yes-man is called Petrus Blarén, the member of the Riksdag, who was perceived by one knowledgeable reviewer as a composite caricature of parliamentarians Allan Vougt, Ivar Österström, Harald Åkerberg and others. Indeed, there were grotesque satirical portraits of both the Prime Minister and the foreign minister in a Sweden where interests of state became opposed to civil freedoms and rights.

Member of the Riksdag Blarén represents the adaptation principle of mental neutrality. His antithesis is called Johannes Krilon – perhaps a mixture of Christ and Plato, perhaps with Churchillian features, and in any case a short and plump, petit bourgeois Swedish estate agent who stands for the principles of militant humanism and good democracy, and whose motto is “Gentlemen, I cannot be neutral. It would be unnatural; indeed, I claim that it would be indecent to the highest degree. It is my human duty, like yours, not to be neutral.”

The Krilon books are a sinister tale of the risks of adaptation. The author’s message is that the coalition government’s infringements of freedom of expression and its recommendation of mental neutrality are the most dangerous and the biggest of all the concessions to the Nazis.

Towards the end of the war, Eyvind Johnson pondered on how future historians would write about the coalition government. In the late summer of 1944, he stayed on the island of Donsö near Gothenburg and cogitated about the future of the “rowers” when the war was over. We who are old enough to have experienced the years of military preparedness know that the expression “rowing over to the right side” was a familiar phenomenon. It was clear that, after El Alamein and after Stalingrad, warship Sweden was seeking western winds: the German military transports through Sweden ceased in the summer of 1943, we finally established diplomatic representation with the Norwegian government in London, and the Norwegians were at last permitted to appoint a regular head of mission in Stockholm. The Danish Jews were able, in October 1943, to flee across the Sound to Sweden. We found ourselves obliged to conclude trade agreements with the Allies to Nazi Germany’s disadvantage. Norwegian and Danish police troops were trained. Sweden had turned. But not only westward: eastward as well. A quick illustration of this: at the Ministry for Foreign Affairs, the head of the political department from 1944, Sven Grafström, was an ardent anti-Nazi. He wrote in his diary on 7 November 1944 that his former boss, Staffan Söderblom, was a textbook example of those who first bowed to the south but then turned their bow to the east.

In a sparkling satire published in the magazine *Nordens Frihet* (“Nordic Freedom”), we meet fellow-traveller Petrus Blarén just as peace is concluded. Blarén the opportunist has started on his new career. The concessions to the south are now forgotten. Parliamentarian Blarén is nowadays a successful Jack-of-all-trades with a multitude of titles – director, statesman, prelate, member of both chambers of the Riksdag, diplomat, benefactor of humankind, supervisor of the document publication board and chairman of the committee for the moderate discontinuation of the black-out. Eyvind Johnson’s forecast is clear. The adaptable “rowers”, led by the coalition government, are heading for a brighter future in postwar Sweden –

provided that history is written in such a way as to forget and gloss over what should be forgotten and glossed over.

And what about Eyvind Johnson’s gloomy forecast? Has the history of the foreign policy of the coalition government been written in the spirit of adaptability and glossing-over?

First of all, the moral view of Segerstedt and his ilk has shown an unabated vigour in the 50 years since the war ended in 1945. It is manifested in public debate, in sweeping overviews and sometimes in literature.

Let me mention a few names. In 1950 Åke Thulstrup, the historian from *Nordens Frihet*, published a very widely read article through Verdandi, the socialist temperance movement, about Swedish foreign policy during the war. He found absolutely no redeeming features at all in the government. The publication of the government’s white papers provided new ammunition for the assessment of the inferior nature of Swedish policy.

And the same thing happens when a moulder of opinion from the postwar generation takes on the coalition government. I am thinking of Maria Pia Boëthius’ pamphlet *Heder och samvete* (“Honour and Conscience”) from 1991. She writes in indignant and exaggerated terms of a government that scrapped both democracy and the rule of law in order to pursue a policy of adaptation on behalf of Germany. Boëthius calls her work a history book for those born after the war, a document of accusation, a catalogue of sins. Her condemnation of the government is crushing. But the precondition for this pamphlet, which has had a great impact, is in fact the wide-ranging research that has been done on Swedish politics and society in the epoch of military preparedness – in particular, in the 20 theses and more from the SUAV (“Sweden in the Second World War”) project, financed and supported by the Bank of Sweden Tercentenary Foundation. It seems, then, a bit funny that Maria Pia Boëthius claims that we historians have withheld or glossed over what happened. That is not the truth.

It was, for example, through the SUAV research that we obtained clarification of the concessions to the Germans at sea. It was through the SUAV research, too, that we were able to reveal that, and how, the Supreme Commander and military command of the Swedish Armed Forces presented a foreign-policy alternative in July 1941. And it meant, for example, Swedish-Finnish military collaboration with Nazi Germany to crush Bolshevism. Activist hopes of this kind were common in the officer corps.

Enough of that. The spirit of Segerstedt lives on. The latest example is the recently deceased writer Eva Alexanderson’s bitter, sombre attack on the adaptation to Germany of Stockholm under the coalition government; she worked as a telephone eavesdropper with language skills for the military police during the war. In her view, mental neutrality – the government’s timorous, ambiguous, yielding policy – brought about a wartime moral injury that has been hard to repair and whose repercussions we still feel.

The Swedish communists followed the same condemnatory line. Thus, Hilding Hagberg spoke in 1966 of “a cut-and-run fighting attitude” and of a coalition government that in every way “worked to make the Hitlerites’ warfare more efficient”; and latter-day voices have been raised in agreement.



Text on banner: "FOR SWEDEN'S FREEDOM AND INDEPENDENCE"

The Social Democratic and right-wing leaders headed the same demonstration procession on 1 May 1940. The reason was that the government parties, before the people and above all internationally, wished to demonstrate their unity in the defence of "Sweden's freedom and independence".
Photo: Archives and Library of the Swedish Labour Movement, Stockholm

I have found one interesting modern Norwegian version of the Segerstedt line in the work of Norwegian historian Olav Riste. He is a specialist on the Norwegian London government. A couple of years ago, in a spectacular context, he launched the hypothesis that during Hitler's years of victory the coalition government counted on a final German victory and therefore treated the Norwegian government-in-exile as a negligible quantity. As an underlying explanatory factor, Riste thinks he can discern persistent negative sentiments from 1905. This is, perhaps, not entirely easy to prove. Polemic has been exchanged, but the last word has undoubtedly not yet been written.

Finally, the coalition government also gets short shrift in the great war history of American historian Gerhard Weinberg, published in 1994. Sweden gets a passing glance. Weinberg considers that the government's foreign policy was aimed at helping Nazi Germany as much as possible, even after Stalingrad, and despite pressure from the Allies. Winston Churchill's words about the coalition government's lost honour recur.

As we see, the moral line is highly ramified. It is spectacular. It rapidly adopts sweeping, negative judgements. It has obtained nourishment from recurrent "revelations" in the mass media on the government's concessions. There is a whole genre based on the wide-ranging research that has been done on politics and society in the years of military preparedness. Amateur researchers have also made contributions. Historians have provided the moralists with ammunition. Anyone can form their own opinion of the coalition government.

Finally, the question is: what do the Swedish historians think? Have we erected a mausoleum to aggrandise the government's members, as Eyvind Johnson feared? Yes, we have this kind of mausoleum, according to political scientist and right-wing parliamentarian Elis Håstad's very widely read paperback from 1958. The aces in Håstad's political hand of cards are the foreign minister and his cabinet secretary, Erik Boheman. His skill is exceptional. Here, we have the moral factor without any complications.

Out of the broad research we have on the coalition government and on Sweden in the second world war, I would like to draw attention here to two modern historians who have carried out in-depth and extensive research to make the government's foreign policy comprehensible.

The main defence for the coalition government's realpolitik, adapted as it was to prevailing circumstances, is undoubtedly Professor Wilhelm Carlgren's 612-page magnum opus from 1973. The book was commissioned by the government. For Carlgren, consideration for Germany appears self-evident for Sweden, the militarily weak, small state. The transit of German soldiers and war matériel may have been the most hated concession and one that, in the popular mind, stood out as continuous, daily, slavish service for Norway's oppressors. But in Carlgren's view, one cannot blame the government for preferring adaptation to reality – German hegemony – to taking risks of war. For the representatives of this line, adaptation to the prevailing situation among the great powers and in the war is virtually an obligation for a small nation, and one that was, into the bargain, sorely lacking in military equipment when it was most needed. In Carlgren's presentation, the emphasis is more on the Ministry and Minister for Foreign Affairs than on the coalition government's cabinet ministers. Günther emerges well. And it is obvious that Carlgren shows a weakness for Minister of Justice Westman's self-confident, slightly cynical, gospel of realpolitik.

Here, historian Alf W. Johansson has a deviant assessment in his 1985 biography of Per Albin and the war.

He considers that the coalition government's foreign policy should rightly be characterised as a "policy of principles". This is, in his view, a better label than "policy of adaptation to the prevailing circumstances". It is wrong, Johansson thinks, to characterise the critical years one-sidedly as the period of concession policy; "negotiation policy" is a better term. German demands and wishes were the subject of negotiation. Concessions were not given lightheartedly, but under "sullen supervision".

Both Carlgren's and Johansson's presentations are based on detailed knowledge and research on the government's manner of taking decisions. It is a matter of arguments, of the decision-making climate and the balance of pros and cons – of which German demands and wishes were complied with, but also which were refused. Most of the refusals related to German military wishes, on a smaller scale than, eg, the agreement on the transit of soldiers and war matériel. These have hardly received any attention. Many of them date from autumn 1941. But they are important, since these refusals counterbalance the image of the government's unilateral complaisance or servility.

There were also crucial moral thresholds of pain for adaptation and concessions. In contrast to the historians, the coalition government's gravediggers find it easy to disregard this complication.

In the spring of 1940, the government rejected German demands for the transit of war matériel to the front in Norway in the course of a campaign: in saying no, the government cited neutrality regulations and moral arguments. This Swedish refusal was issued while cabinet ministers were vacillating in a markedly defeatist way. There was great trepidation, but a no it was nonetheless. And on 18 May 1940 Sweden prepared itself for a German attack. The other threshold of pain was, of course, at Midsummer 1941, when the German division was allowed through as a once-only concession. The acme of the concession policy had been attained. But the government came very close to breaking up.

The pain thresholds are important in Alf Johansson's presentation. Here, the final judgement on the coalition government is this: it managed fortunate circumstances well, but without heroic gestures. Alf Johansson makes the facts intelligible, but does not exculpate the government. This is no panegyric. On the contrary, it is clearly emphasised in the book that the coalition government's relationship with Nazi Germany, despite its successful outcome, commanded a humiliating moral price that cannot be disregarded by posterity.

Among the historians, we find no condemnations of the coalition government, but no canonisation either. Carlgren perhaps goes some way in this direction with his plea in defence of a successful Ministry for Foreign Affairs and prosperous management of foreign policy. But here, too, mention is made of the humiliating price of adaptation. I can discern a tenuous, but clear link between the government's backbiters – the Segerstedt line – and the Swedish fraternity of historians. In both camps, the past has left a bitter aftertaste.

It is time to sum up. It has been, and still is, easier to blame than to defend the neutrality policy in favour of Germany pursued by the coalition government – for several reasons.

First, it is easy to be wise after the event and self-righteously score moral points at the coalition government's expense. With hindsight, it is easy to take risks of war. And the historical perspective must not be lost. Sweden has not been at war since 1814. Fortunately, we lack experience of war in the collective memory that is our modern history. Without that experience, it may be all too easy to adopt a brave stance oneself and condemn the coalition government for complaisance, fear and dishonour.

Secondly, the secrecy from the period of the coalition government persisted during the cold war. Sweden's neutral position between the superpower blocs long imposed delaying obstacles in the way of a critical survey of coalition rule and other phenomena. The road to openness has been long. The historians engaged in the SUAV project, for example, were for many years not permitted to see material from the Ministry for Foreign Affairs relating to Finland and the Soviet Union. Some archives were, moreover, not released for scrutiny until towards the end of the 1980s. And when will the major survey of the military police become freely accessible?

This has meant that it was many years before research on the epoch of military

preparedness gained momentum. It took time before the concession policy was surveyed. It might look as if the coalition government and military leadership had skeletons in the cupboard that it was in someone's interest to conceal. Skeletons or no skeletons, it is of course a matter of how we judge the coalition government's foreign policy, its foremost goal – preserving the peace for Sweden – and its means, the policy of adaptable neutrality. We now know a great deal about this regime. But what we still, to this day, know too little about is the climate of opinion in the political, military and civil establishments during the Nazis' years of victory. What was the extent of pro-German and pro-Nazi opinion? How much defeatism was there? What kind of preparations for and expectations of a final Nazi victory existed when Hitler's triumph seemed virtually complete? Research on Sweden during the second world war must continue.

It is important to focus the searchlight on those who reasoned like the head of the press department, Major Sven Wijkman (5 June 1940): "No doubt it's best to howl with the wolves and play an active part in the new Europe, instead of resisting in the manner of Segerstedt and dying with a feather in one's cap."

I have pinpointed several reasons why the posthumous reputation of the coalition government has, for half a century, left a bitter aftertaste. Ultimately, moral indignation about Sweden's adaptation to Germany must be seen in the light of the fact of Swedish collaboration with the regime responsible for the Holocaust. Or, as American historian Karl A. Schleunes expressed it, since 1945 the world has entered an epoch "which we cannot avoid labelling 'After Auschwitz'".

So, for or against the coalition government? Defence or condemnation? Realpolitik or morality? Per Albin Hansson or Torgny Segerstedt?

The choice is a question of responsibility. Segerstedt's responsibility was restricted to his newspaper's readers and shareholders. The Prime Minister's sphere of responsibility comprised the Swedish people and Sweden. It was a matter of keeping the peace. That was the task. That was the number one item on the coalition government's agenda. But the choice of line to adopt is also determined by the question of how best to protect Swedish democracy. By restricting democratic freedoms and rights? Or by not temporising with democracy, especially if it is under threat?

The coalition opted for the first line. But it had a price.

In the Riksdag on 12 June 1940, the Prime Minister had defended a government bill that entailed an important step along the path of repressing freedom of expression. The issue was the introduction of a censorship law in the event of war or risk of war. That same evening, Per Albin Hansson wrote in his diary – and I quote – "It is dismal to fight for what, deep down, one abhors; but sometimes it is necessary." In this statement the two lines I have referred to – that of realpolitik and that of morality – meet, with a decided sense of frustration and moral anguish. It was decidedly easier to be the heroic head of *Handelstidningen* in Gothenburg than to be the unheroic leader of a coalition government whose categorical imperative was the preservation of peace.

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Introduction

High blood pressure (hypertension) is one of the most important risk factors for the development of cardiovascular disease. It causes high social costs and, untreated, results in increased pathology and mortality. Hypertension is a heterogeneous state, caused by a number of hereditary and environmental factors in combination. In over 90% of cases, we lack knowledge of the causes. The greatest challenge to research on hypertension is to clarify the systems that regulate blood pressure and identify their defects. This will enable us, in the future, to identify groups of patients who should be treated preventively, and to offer focused, specific therapy for manifest hypertension.

The kidneys' regulation of the salt and fluid balance is the most important system in the body for maintaining constant blood pressure. Our studies concern basal mechanisms in renal regulation of blood pressure. Our hypothesis is that hereditary defects in the kidneys' own system for regulating salt transport are among the causes of high blood pressure.

Hereditary Changes in Renal Function as a Cause of High Blood Pressure

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The kidneys control blood pressure by regulating the salt and fluid content of the body

The kidneys contain around 1 million units, nephrons, comprising a conglomeration of vessels, glomeruli, and a system of long tubes, kidney tubules (Fig. 1). Of the blood pumped out of the heart every minute, one-quarter passes through the kidneys, and 120 litres of primary urine are filtered through the glomeruli daily. The primary urine then passes through the kidney tubules, where the water, salts

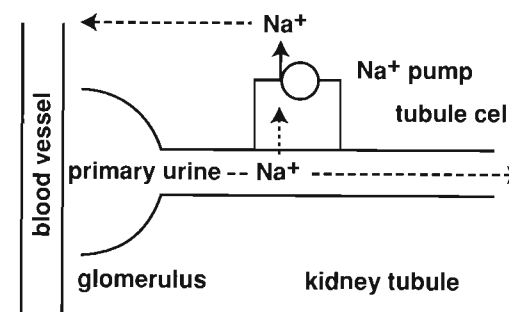


Figure 1. The primary urine is produced by filtration in the glomeruli. Salts, organic substances and fluid are resorbed by the renal tubule cells and restored to the blood. The Na⁺ pump is the energy source in this resorption.

and organic substances are largely resorbed, giving a final urine volume of around 1.5 litres a day. The most important ion in determining blood volume and the volume of the fluid surrounding the cells (the extracellular fluid) is sodium (Na^+). This is also the most important ion in the resorption process in the kidney tubules. The resorption of Na^+ , which amounts to 99%, serves to govern the resorption of other substances. With these large flows, it is easy to understand that even a subtle disturbance may have drastic repercussions on the salt and fluid balance in the body, and therefore on blood pressure.

The absorption of Na^+ in the kidney tubules takes place largely by means of the Na^+ pump (Na^+, K^+ -ATPase). This is an energy-consuming process, and the Na^+ pump is alone responsible for 80% of the kidneys' oxygen consumption. Na^+ is pumped out of the tubule cells and, in the process, generates the electrochemical gradient necessary for the entire resorption process. The resorption of Na^+ in the kidney tubules is minutely controlled. It is regulated by the renal nerves and by circulating, locally produced hormones. Hormones and factors that increase Na^+ excretion are known as "natriuretic": they reduce the salt and fluid content of the body and lower blood pressure. Hormones and factors that decrease Na^+ excretion are termed "antinatriuretic": these increase the body's salt and fluid content and raise blood pressure.

Our studies are in large measure devoted to this regulation of the Na^+ pump's activity, defects in which may result in high blood pressure.

Dopamine and noradrenalin – a balanced system in the kidneys for controlling blood pressure

There are numerous natriuretic and antinatriuretic factors in the body. We have mainly studied two substances: dopamine and noradrenalin. These are both found in the kidneys and are crucial to the kidneys' own regulation of Na^+ excretion and blood pressure. Dopamine is produced in the cells of the kidney tubules and has a natriuretic effect. The neurotransmitter noradrenalin, coming from the renal nerves, has an antinatriuretic effect.

When the body is exposed to a high salt intake, the kidneys respond by producing more dopamine and excreting more salt in the urine. If the dopamine effect in the kidneys is blocked, salt excretion is impossible and the result is a retention of salt and fluid in the body. Dopamine is broken down and eliminated by several enzymes, including COMT (catechol-O-methyltransferase), which is found in the renal tubule cells. When dopamine is excreted from the tubule cells, it exerts its effects on the surrounding cells. On the tubule cells, there are receptors where dopamine can bind and transmit its effect into the cell via intracellular signalling systems.

Nerves from the autonomic nervous system, which controls the majority of involuntary functions in the body, go to the kidneys. Activation of renal nerves results in reduced Na^+ excretion and, accordingly, fluid retention. The importance of the renal nerves in blood-pressure regulation may be illustrated by the fact that the renal nerves used to be excised to treat life-threatening high blood pressure, thereby bringing about a prompt reduction in blood pressure. The neurotransmitter used by the renal nerves is called noradrenalin. It has two different main groups of

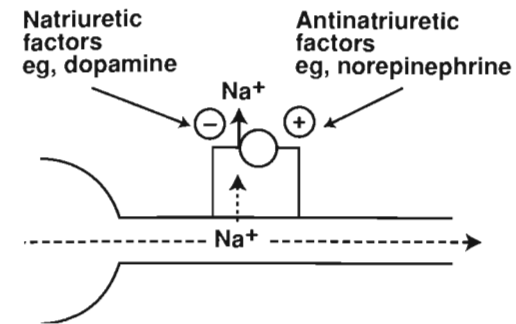


Figure 2. Antinatriuretic factors, such as norepinephrine from the renal nerves, increase the activity of the Na^+ pump. More Na^+ is absorbed from the urine, the salt and fluid content of the body increases and the blood pressure may rise. Natriuretic factors, such as dopamine from the renal tubule cells, reduce the activity of the Na^+ pump. This means that more Na^+ is excreted in the urine. The salt and fluid content of the body decreases and blood pressure falls.

receptors, α and β , which are both represented in the kidney tubules. When noradrenalin binds to its receptors, a large number of intracellular signalling systems are initiated, resulting in changes in cellular function.

The Na^+ pump is the driving force in salt and fluid resorption, and therefore a key point in blood-pressure regulation

How is a change in Na^+ resorption brought about in the individual tubule cells? Our research group and others have shown that the activity of the Na^+ pump is regulated by the factors governing the salt balance. Natriuretic factors, such as dopamine, atrio-natriuretic factor and parathyroid hormone, reduce the Na^+ pump's activity, while antinatriuretic substances like angiotensin, noradrenalin and neuropeptide Y increase the pump's activity. The activity level of the Na^+ pump is thus a key point in the kidneys' Na^+ excretion, and therefore in blood-pressure regulation. The question of how the Na^+ pump's activity level is determined is crucial for an understanding of renal regulation of the salt balance. Below, we present the latest results of our hypertension research. The first part relates to general control mechanisms in the kidney cells. In the second part we deal with results of experimental animal studies of hypertension and the combination of hypertension and diabetes, and present a new treatment model for hypertension. The last part deals with clinical studies of patients with diabetes and/or hypertension.

I. Cellular mechanisms in the regulation of the Na^+ pump

(with results from studies carried out by Jessica Fryckstedt, Ulla Holtbäck, DaiLin Li, Sam Cheng, Roger Belusa, Petter Förberg, Yoshiyuki Ohtomo and Bo Sahlgren, in cooperation with Paul Greengard, Department of Molecular and Cellular Neuroscience, Rockefeller University, New York)

Over the past few years, we have devised a model for the manner in which antinatriuretic and natriuretic substances control the Na^+ pump by acting on a common network of intracellular messengers. The final link in this chain is a

phosphorylation of the Na⁺ pump, ie, the linking of a strongly negatively charged phosphate group with the protein. The three-dimensional structure and function of the protein is hereby changed. We have shown that the Na⁺ pump's activity decreases when it is phosphorylated. The Na⁺ pump can then be dephosphorylated and once more increase its activity. Phosphorylation and dephosphorylation are controlled by an intricate network of intracellular signalling pathways. These integrate and modulate the effects of the natriuretic and antinatriuretic factors, resulting in a well-adjusted activity level in the Na⁺ pump.

The latest findings relate to the stress hormone noradrenalin. Strangely enough, noradrenalin alone has no effect on the Na⁺ pump, although we know that it increases Na⁺ reabsorption. We therefore investigated its effect on its two different receptors. Stimulation of the β receptors reduced the Na⁺ pump's activity, while stimulation of the α receptors yielded a stimulation of the pump's activity. What in fact determines the net effect proved to be a co-transmitter, an auxiliary substance, known as neuropeptide Y (NPY). We have located NPY in the nerve endings in the kidneys, in conjunction with noradrenalin. With strong nerve stimulation, NPY is released with noradrenalin and then reinforces the α-receptor effect, while simultaneously inhibiting the β-receptor effect. The net result is then a stimulation of the Na⁺ pump.

All in all, we now have a more complete picture of the intracellular signalling systems that control the Na⁺ pump's activity. Defects in this system may result in inadequate or absent responses to regulatory substances and, eventually, high blood pressure.

II. Experimental animal models for high blood pressure and/or diabetes

(with findings from studies carried out by Akinori Nishi, Gianni Celsi, Anna Körner, Ann-Christine Eklöf and Shanlin Chen)

One useful method for studying causes of high blood pressure is experimental animal models. These rat strains have genetic defects that cause high blood pressure. One well-documented strain is the Dahl salt-sensitive (DS) rat, which develops

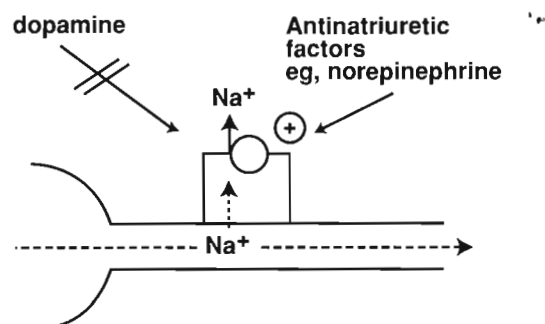


Figure 3. In clinical studies and experimental animal studies, we have investigated the causes of hereditary predisposition for hypertension, and found that dopamine regulation of the Na⁺ pump does not function normally. This means that the antinatriuretic side becomes predominant, which causes increased salt and water retention and raised blood pressure.

high blood pressure in response to high salt intake. It may be compared with the Dahl salt-resistant (DR) rat, which does not develop high blood pressure. We have studied the dopamine system in these rats before they have hypertension. The DS rat responds to a dopamine load with a lower rate of salt excretion than the DR rat. Dopamine cannot inhibit the Na⁺ pump or increase the intracellular messenger cyclic AMP (cyclic adenosine monophosphate) in DS. Thus, the dopamine receptor is not connected with its messenger molecule in the DS rats. This is an example of defective dopamine regulation of the Na⁺ pump owing to an inadequate connection between the components in the system. In due course, the high blood pressure in the DS rats develops as a result of the defective dopamine regulation.

Diabetes + hypertension

In insulin-dependent diabetes, renal function deteriorates as a result of the basic disease. After a couple of years, most patients develop signs of kidney damage, which inexorably leads to kidney failure and dialysis. Kidney disease caused by diabetes (diabetic nephropathy) is, at present, the largest single reason for dialysis treatment. The mechanisms of this process are largely unknown. In the kidney tubules, the activity of the Na⁺ pump is increased in diabetes. We have shown that the raised glucose concentration in the urine increases the absorption of Na⁺ in the tubule cells and, consequently, Na⁺ pump activity. This causes an increase in oxygen consumption, renal blood flow and filtration in the glomeruli. These are factors that may contribute to the development of diabetic nephropathy.

One of the clinically most interesting factors in diabetic nephropathy is the development of high blood pressure. There are grounds for believing that diabetics with a hereditary predisposition for high blood pressure run a higher risk of developing diabetic nephropathy. In accordance with our hypothesis on changes in the renal dopamine system as a contributory cause of salt-sensitive hypertension, we are investigating the connection between salt intake, salt excretion and dopamine production in diabetes, in experimental animal studies and clinical trials.

In the experimental studies, we are investigating the salt-sensitive Dahl rat. These salt-sensitive rats show a paradoxical increase in the activity of the Na⁺ pump when salt intake is high – not a decrease, which is normal and necessary to restore the salt balance. When diabetes has been induced in the rats by means of streptozotocin treatment, this increase in pump activity is accentuated. The rats also show kidney changes typical of diabetes within a short time, and even before their blood pressure has risen. These results support the hypothesis that hereditary factors that cause hypertension also contribute to the development of diabetic nephropathy.

A new treatment principle for high blood pressure

Reinforcing the natriuretic effect of dopamine in the kidneys is one conceivable way of treating high blood pressure. Dopamine itself is given as a continuous infusion in intensive care to boost urinary excretion. Unfortunately, it is not possible to give dopamine in tablet form, and this means that it cannot be used for other purposes. We have demonstrated the intrarenal location of COMT, the dopamine-metabolising enzyme. The pharmaceutical company Orion has developed a specific inhibitor of COMT, nitecapone. Inhibiting COMT makes more dopamine

available in the kidneys. When we gave rats nitecapone, their Na^+ excretion increased and the Na^+ pump was inhibited in their kidney tubules. Nitecapone reduced blood pressure in the rats with high blood pressure, but not in those with normal blood pressure. This represents an entirely new principle for treatment of high blood pressure. By reinforcing the effect of an existing natriuretic substance, one can offer a focused and specific therapy. Clinical trials of this agent are planned.

III. Clinical studies of defects in the dopamine system in young adults with an inherited predisposition for high blood pressure or with insulin-dependent diabetes

(with results from studies carried out by Susanne Rudberg, Carolin Lemme and Anneli Krekula, in co-operation with Ulf de Faire, Karolinska Hospital)

In order to verify the findings of the experimental animal studies regarding defects in the renal dopamine system, we carried out corresponding clinical studies. We studied a group of young adults with either insulin-dependent diabetes or a hereditary predisposition for high blood pressure. These were compared with normal individuals. All the groups were treated with three days' normal or high salt intake. Subsequently, measurements were taken of their blood pressure and urinary excretion of salt and dopamine (a measure of renal dopamine production). Blood pressure was raised in individuals with a hereditary predisposition for hypertension. Dopamine excretion was the same in all groups with a normal salt intake. With a high salt intake, the normal individuals increased their dopamine excretion, as expected, in order to be able to excrete more Na^+ . Neither the diabetics nor the patients with a hereditary predisposition for high blood pressure incurred elevated dopamine excretion. A statistically significant correlation between dopamine and salt excretion was found only in the normal individuals.

This study is now being followed by one of men with "borderline hypertension". They receive a dopamine infusion and their salt excretion etc is measured. Preliminary results suggest that the borderline hypertensives respond with less salt excretion than the normal individuals. All in all, this is evidence for asserting that defective dopamine regulation is one component in the renal defects resulting in high blood pressure.

Summary

Through a combination of cellular studies, experimental animal studies and clinical studies, we have partially clarified some of the basal mechanisms that control blood-pressure regulation in the kidneys. Defective dopamine regulation of the Na^+ pump is one of many causes of high blood pressure. This knowledge has brought us a mite closer to our goal: to identify the causes of high blood pressure in order to trace risk groups and also provide specific therapy.

As knowledge of the causes of hypertension increases, we shall be able to find out which individuals can benefit from preventive treatment owing to a hereditary predisposition to develop high blood pressure. We shall be able to treat patients with high blood pressure using medicines directed at the particular defects in their

blood-pressure regulation. This will enable us to avoid treating patients unnecessarily, while simultaneously giving us an effective treatment with a minimum of side-effects.

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The six-year research programme, "Changing Processes in North European Organ Art 1600-1970 – Integrated Studies on Performance Practice and Instrument Construction", was begun at Göteborg University in January 1995. It attempts to study the totality of the art of organ: instrument building, composition and performance. It bridges gaps between past and present, instruments and music, science and art, technology and the humanities. The programme combines modern scientific methods and historical craftsmanship. It formulates theories but also gives them concrete shape as organ reconstructions and music recordings. It treats the organ as a microcosm of large-scale developments in society and culture: since the Middle Ages the instrument has invariably been a part of Western civilization, but its appearance, sound and function have been subject to constant change.

Changing Processes in North European Organ Art 1600-1970

An Integrated Research Programme at
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The programme looks at the development of the organ art in terms of a complex interplay of several factors on different levels. It sees instrument building and music-making as interrelated and interdependent, and investigates the relationships between the two while also taking into account socio-historical and ideological contexts.

The structure of the programme reflects these fundamental assumptions, and can be grouped into three main sections: a) comprehensive studies, b) instruments and c) music. Together these sections comprise 14 individual research projects, ranging from detailed scientific investigations to broad, context-oriented historical studies, and engaging a number of scholars and scientists with widely differing specialities. An important part of the instrument-related research is conducted by scientists from the Chalmers University of Technology (CTH). Documentation is an important aspect of the organization of the programme.

Although the individual projects differ in scope, duration and character, they are nevertheless interrelated: specialized studies in limited areas form the basis of projects of a more comprehensive nature, where aspects of development and change are brought to the fore. Although projects of different kinds are running simultaneously from the start of the programme, three different stages can be discerned. The first period is dominated by studies related to instrument-building, the second by projects concerned with musical interpretation and the third and last by comprehensive studies.

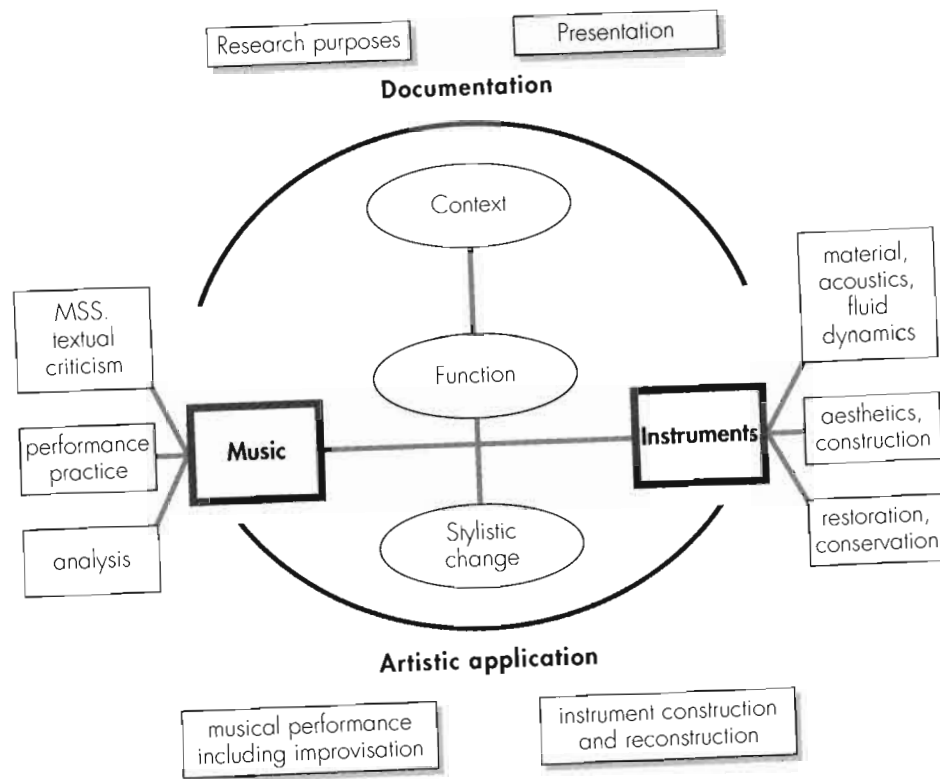


Fig. 1. Outline of the basic structure of the research programme

Background

I: The Göteborg Organ Art Center (GOArt)

The vision of a center for the organ at Göteborg University originated in 1988. In that year plans were sketched for an organ-building programme with three instruments, each representing an important epoch in the history of organ-building and organ music. In the following year two of these projects began: a North German 17th-century organ and an organ in French 19th-century style (see below). The third organ project, a reconstruction of a Swedish late 18th-century organ, forms part of the current research programme. An important prerequisite for the development of the center was the "creative performance research" doctoral programme at the Department of Musicology, initiated by Professor Jan Ling, which enabled practising musicians to engage in performance-related research. The basic idea of the center was to create a symbiosis between the various facets of the organ art: organ-building, music-making, teaching, musicological and organological research, etc. The exchange of ideas and views across professional disciplines would be encouraged. New methods would be developed to preserve and reconstruct historical instruments. New insights would help musicians to do better justice to music from different epochs. The overall aim was to deepen the understanding of the relationship between the instrument and its music, and, in seeking to

rediscover forgotten knowledge and craftsmanship from the past, to create new possibilities for the future of organ building, playing, composing and teaching. The realization of the Göteborg Organ Art Center (GOArt) was finally made possible through the grant for the current research programme.

II: Two Organ-Building Projects At Göteborg University

The North German Project

This project, which began in 1989, will reconstruct a large North German 17th-century organ. North German organ music from this period is generally considered to represent one of the high points of organ culture, and it has long been a main focus of attention for musicians and musicologists. However, original instruments from this time have been preserved only to a limited extent, most of them small country organs. The new organ will make it possible to listen to the music of the great North German masters, like Dietrich Buxtehude, as it was originally intended to sound. In the course of the project it became clear that the fulfilment of the original goals of the reconstruction necessitated a much more thorough and multi-faceted research than had ever before been attempted in connection with organ building. Prominent organ builders (Mats Arvidsson, Sweden; Henk van Eeken, Netherlands; Munetaka Yokota, USA) cooperate in the project together with organologists and specialists in acoustics, materials technology and thermo and fluid dynamics. The North German project has generated the research model that forms the basis of the larger research programme, funded by the Bank of Sweden Tercentenary Foundation. In January 1995, the building of the organ became coordinated with the research within the programme. The organ is expected to be completed in 1998, and will be placed in Örgryte Church, Göteborg. The project has been funded by Svenska Handelsbanken (Swedish Bank of Commerce), and the Swedish Council for Planning and Coordination of Research and the Swedish Council for Research in the Humanities and Social Sciences.

The "French" Project

Another organ reconstruction project at the University is the "Cavaillé-Coll project". The aim here is to build the new main organ of the Göteborg School of Music and Musicology strictly according to the philosophy of the famous 19th-century French organ-builder Aristide Cavaillé-Coll. Although this is not a research project in the strict sense, several of the methods used or developed within the North German organ project, for instance in materials technology and measuring technique, have also been applied here, which has led to important new knowledge about Cavaillé-Coll's pipe-making technique, a process more similar to that of the Baroque masters than had been expected. The project is expected to be completed in 1997, and has been partly funded by the Knut and Alice Wallenberg Foundation.

Comprehensive Studies: the Organ as a Mirror of its Time

The organ can in many respects be looked upon as a mirror of its time; the development of organ building and composing reflects changing aesthetic ideals, and religious and philosophical currents, but also economic circumstances and

technological innovations. From another point of view, the organ unites visual art (architecture, painting, sculpture) with acoustical art (musical sound produced jointly by musicians, composers and instrument builders). Organ research must therefore be concerned with *culture* in a broad sense, encompassing a wide spectrum of human activity and competence with artistic as well as craft-oriented, scholarly and scientific aspects. The comprehensive and context-related projects within the research programme may thus be characterized as cultural studies.

The comprehensive studies section comprises three projects:

1. *The organ as a mirror of its time. The influence of aesthetic and extra-musical factors on organ building and organ music.* This project deals with problems concerning the influence of factors such as transcultural currents, theological ideas, industrialization and social change.

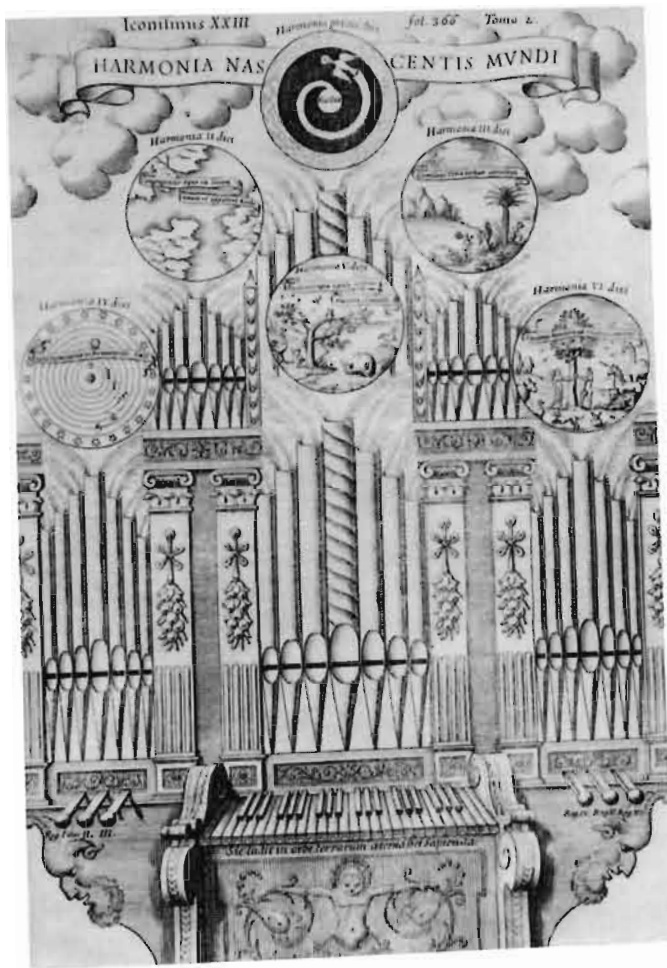
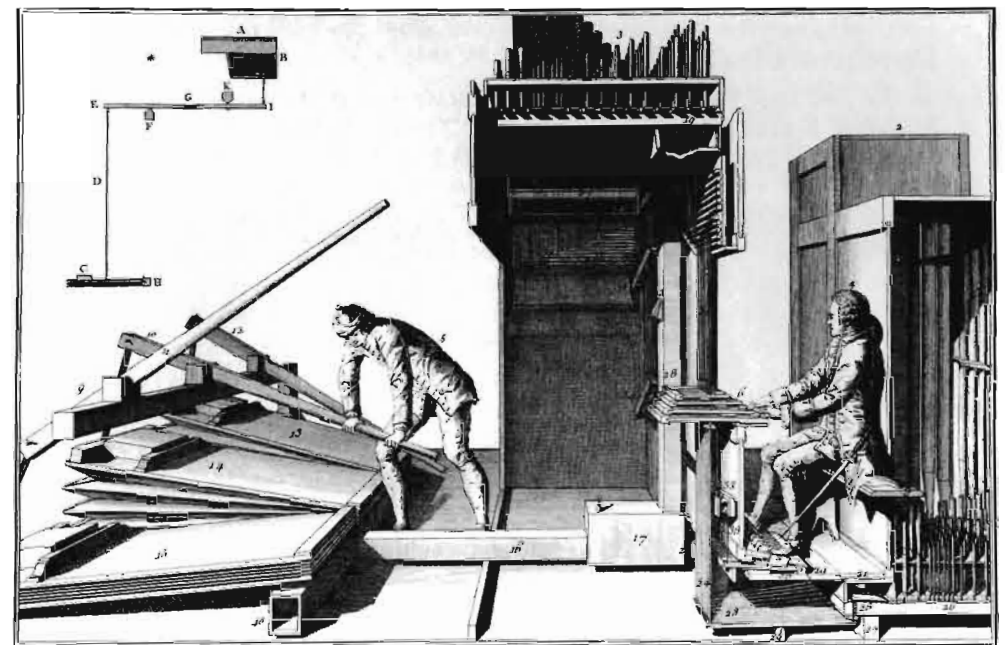


Fig. 2. The "Weltorgel" picture from Athanasius Kircher's *Musurgia Universalis*, Rome 1650, showing the organ as a symbol which integrates the macrocosm with the microcosm according to Kircher's philosophy.

2. *The organ, the organist and organ repertoire: Studies on performance practice through the ages.* The project describes the development of organ playing within Northern Europe, where influences transcending national and cultural boundaries will be taken into account. Special attention is given to the relationships between organ playing and organ building.
3. *The North European Organ 1600-1970: changes in construction, aesthetics and function.* Lines of development in North European organ building will be described, including construction and architecture, wind supply and action, pipemaking and sound. An important link exists between the Cahman family of organ builders in Sweden and the North German organ school. Special attention is given to the much debated question of the role of mathematical proportions in 17th-century North German organ building. Measurements have been carried out on all preserved façades of organs built by the famous Arp Schnitger (1648-1719). Important problems to be investigated include the extent to which façades reflect proportional thinking and possible conflicts between architectural and acoustical considerations.

Instruments: Rediscovering the Secrets of the Old Masters

The art of the organ builders of the past, which has produced innumerable treasures, many of which still please both the ear and the eye, has to a great extent been lost in the course of the 20th century, partly due to a certain industrialization of



How Does an Organ Work?

Fig. 3. Cross-section of an organ, taken from Dom Bédos' *L'Art du Facteur d'Orgues*, Paris 1766-1778. Photo: Lasse Lindkvist, Göteborg.

organ building, partly due to exaggerated negative reactions against the style of the immediate past. The main aim of the instrument studies is to rediscover the secrets of the old masters. The projects include specialized studies on pipe materials, acoustic problems and the behaviour of the air within the organ wind system, as well as organological studies on construction principles and aesthetics. It also involves practical application in the form of reconstruction of historical instruments.

For these purposes a complete *organ research workshop* has been set up at Göteborg University. The manufacturing methods used here are intended to resemble as much as possible those of historical organ building, including the use of reconstructed historical tools. The workshop also functions as a laboratory for comparative experiments concerning the influence of different methods on the quality of the parts of the organ.

Materials Technology: How Do the Material and the Construction Methods Influence the Properties of Organ Pipes?

The question of how much and in what ways the material used in building organ pipes influences their sound has been much discussed among organ builders and organologists. Although lead-tin alloys have always been regarded as the ideal material, the proportions of the two main components, and also the production process, have varied considerably. These changes can be partly ascribed to the influence of technological development.

The aim of the material research is to recreate the entire process of pipe production, including the replication of historical alloys. To fulfil this goal, the research has been carried out in two stages.

In the *first stage* the composition and microstructure of samples of alloys from historical organs have been investigated. The results show that the old masters used tin/lead alloys with a surprisingly wide variation in the proportions of the

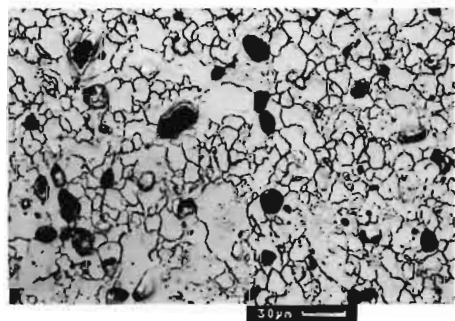


Fig. 4a. Microstructure of an historical lead-rich pipe alloy, analyzed using scanning electron microscopy (Dept. of Physics, CTH, Göteborg). The sample is from the organ in Övertorneå Church, Sweden. The organ was built by Paul Müller in 1650.

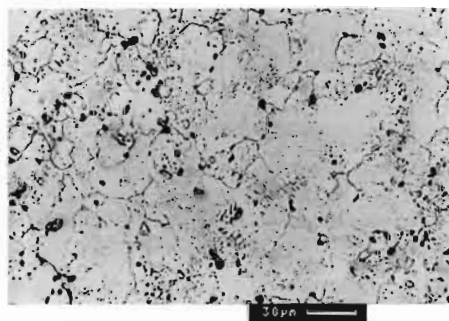


Fig. 4b. Microstructure of a modern lead-rich pipe alloy, one year after casting, analyzed using scanning electron microscopy (Dept. of Physics, CTH, Göteborg). The alloy has been prepared for studies on the replication of historical alloys.

main elements, lead and tin. Moreover, it was discovered that, in contrast to modern materials, all historical alloys also contain "impurities," that is, small amounts of other elements, some of which play an important role for the strength of the alloys.

The *second stage* departed from the question: what factors in the manufacturing of pipe material are important for the resulting properties? Test castings have been made with a series of lead-tin alloys to which have been added different "impurities". In the series of castings factors such as the initial temperature of the melt before casting and the material of the bench surface have been varied. It was found that such variations cause differences in the microstructure and thickness of the resulting cast.

Aging processes of pipe material, which are of particular interest for comparing antique and new organs, will also be subject to careful study.

The project is conducted at the Department of Engineering Metal and the SIMS Laboratory, CTH, by Milan Friesel and Birger Karlsson.

Acoustics: Why Do Old Organ Pipes Sound Different From New Ones?

The studies in acoustics currently focus on three different topics: the tone generation process of organ pipes, the mechanical properties of pipe material and the room acoustic design of various churches.

A theoretical model has been developed which describes the tone generation process of organ pipes. It is used to investigate the influence of different geometrical parameters (e.g. pipe cross section, mouth opening, outlet of the jet) and physical parameters (e.g. flow speed, damping) on the tone generation. It also offers an opportunity to listen to simulations and to compare them to reality. Theoretical results are compared with measured data and show good agreement both objectively by means of spectral analysis and subjectively by means of listening tests.

Measurements of the acoustical properties of pipe material (i.e. damping and elasticity) were carried out for some historical materials. The intention of this work is to clarify the extent to which historical material differs from modern material with regard to acoustical properties. The results of our measurements reveal significant differences between materials. However, the question arises whether these differences are consequences of the properties of the different alloys or if factors like aging, tin pest, or deformation processes are responsible. Therefore a thorough parameter study will be carried out during the next half year which focuses on new pipe material treated in various ways to simulate these effects.

Several room-acoustical environments have been investigated and documented. A 1:10 scale ultrasonic model of the Örgryte New Church has been constructed in collaboration with the organ research workshop. The model has now been almost completed. In the next phase, the sound of the organ will be simulated by means of a loudspeaker in 1:10 scale.

The project is conducted at the Department of Applied Acoustics, CTH, by Mendel Kleiner, Wolfgang Kropp and Peter Svensson.

Thermo and Fluid Dynamics: How Does the Wind Influence the Sound of the Organ?

The figure shows a simple model of a wind supply system in an organ. On the downstream side of the valve, the pressure equals atmospheric pressure and on the upstream side, in the wind chest, the pressure equals the organ wind pressure. When the organ keys are pressed, thereby opening the pallets, pressure waves are created and start to propagate in the wind system. These pressure waves cause the pressure in the wind chest, and consequently also the pressure in the tone channel just ahead of the pipe, to fluctuate. This means that the sound from the organ will have "life," which is hard to explain and quantify but nevertheless is important for the organ sound. The aim of the wind system research is to gain better understanding of the behaviour of the wind system.

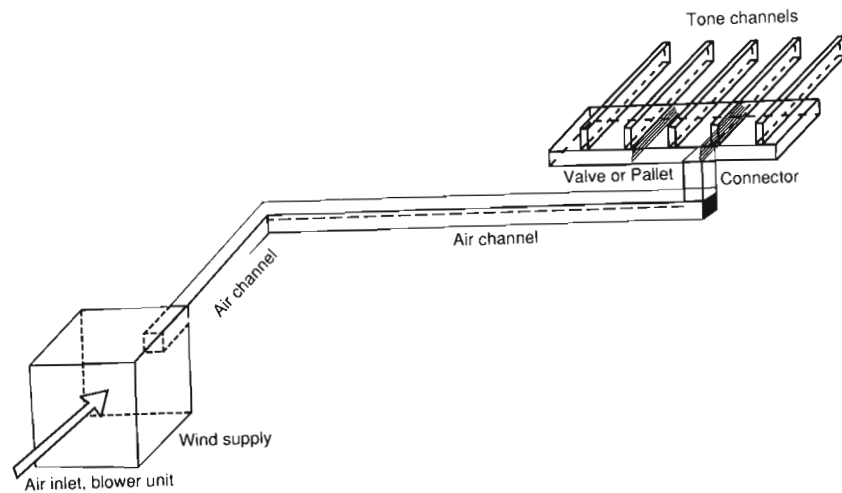


Fig. 5. Model of the wind system of an organ.

When trying to understand the behaviour of the wind supply system one soon realises that the wind system is extremely complex. Therefore research has focused on gaining knowledge by means of computer simulations. The first step was to simulate the basic pressure wave propagation in simple air channels. Thereby knowledge about the response and behaviour of simple systems was obtained. In the second step, drawings of an existing organ were consulted and a computer model of the system of air channels was made. This method yielded interesting results, but it was realized that to obtain the desired answers to the questions put, it would be necessary to proceed to a third step: the construction of an organ test rig. The research that followed focused on validating the calculation method and its computer implementation and on obtaining data about organ-specific components. The continuing work in this field will focus on making computer models of bellows and pipes in order to come even closer to organ-like conditions.

The project is conducted at the Department of Thermo and Fluid Dynamics, CTH, by Tord Granhäll and Bror-Arne Gustafsson.

Studies on Organ Pipes, Wind Systems and Action Mechanisms: How Were the Antique Organs Made?

This research, conducted by organologists and by researchers who are also qualified organ builders (Carl-Gustaf Lewenhaupt, Munetaka Yokota), is focused on comparative studies on principles of pipe construction in organs from different epochs. Similar studies will also be made on other important aspects of organ building, such as wind systems and action mechanisms. The character of the project is mainly one of coordination and evaluation of results from the above-mentioned studies. Very important material for this project is also provided by the minute documentation of selected historical organs (see "Documentation" below). These studies, especially those relating to Swedish organs (Leufsta bruk, Gammalkil), will be of special importance to another project within the research programme, *the reconstruction of a Swedish organ from the late 18th-century*, a period characterized by an extremely high level of quality in Swedish organ building.

The detailed investigations of organ pipes will also be useful for another project aiming at the *development of new conservation and restoration methods* for organ pipes.

Music: How Was It Made, How Was It Played, How Did It Sound?

These studies focus on problems of performance practice in order to develop a deeper understanding of changes in musical style. They draw on studies of primary sources such as music manuscripts and on analytical studies. Special attention is given to the interplay of the different factors that together form the basis of artistic performance. In this context the relationship between composition and improvisation is also taken into account.

The individual research projects represent a selection of traditions and epochs. The research is continually evaluated through practical music-making, for instance on historical or reconstructed instruments or in relevant functional contexts. Here the artistic experience of the scholar is of great importance.

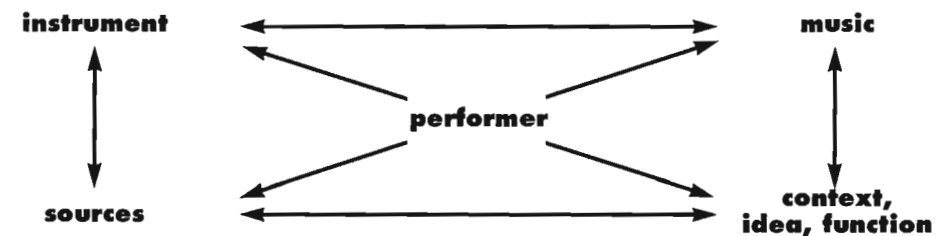


Fig. 6. Sketch illustrating the general scheme for performance practice studies

The North German Organ School ca 1630-1720

This project (led by Hans Davidsson) is concerned with the "Golden Age" of the most famous North German organist-composers, including Heinrich Scheidemann, Matthias Weckmann and Dietrich Buxtehude. It departs from the following questions:

1. What was the function of the organ music, and how did this function influence the shape of the music?
2. What were the differences and the similarities between the vocal and instrumental music of the town organists and their organ works?
3. What were the relationships between the emotional content (*Affekt*) of the music and such factors as tuning systems? (This part of the project is intimately related to the North German Organ reconstruction project.)
4. How is the *improvisation* practice (the dominant way of making music on the organ in this epoch) reflected in treatises, tutors and written music, and how was it taught?

In connection with this last question, a pedagogical project, led by William Porter, began in November 1995, whose aim is to reconstruct 17th-century teaching methods as formulated in contemporary tutors and treatises.

The 18th Century: Bach, Father and Son; Organ and Keyboard Music

The 18th century is a crucial time in the history of organ music. With J.S. Bach (1685–1750) the enormously rich Baroque organ tradition came to its last full flowering. After his death, the stylistic changes brought about a decline in the status of the organ while the importance of other keyboard music increased.

The project is characterized by a combination of source studies, instrument studies and practical music-making, the latter presented in the form of recordings of J.S. Bach's complete organ works on relevant historical instruments (Jacques van Oortmerssen).

The research concerns aspects of performance (articulation, registration, tempo), instrument-building (mechanisms, sound, tuning systems), and functional context. One of the main objects is to investigate the influence of other keyboard instruments on organ playing. Different kinds of instruments are compared with respect to possibilities of dynamic expression, character and balance of sound, attack, etc.

The *clavichord project* (led by Joel Speerstra) focuses on the importance of the clavichord to organists: both as a pedagogical tool and as a practice instrument. The careful reconstruction of several models of clavichords provide tools for performance practice research. An ongoing experiment of teaching pedal clavichord techniques to organ students explores whether a universal keyboard technique can be identified.

Special attention is given to compositions that were not explicitly intended for any particular keyboard instrument. An investigation (by Joel Speerstra) has been made into the keyboard works of Carl Philipp Emanuel Bach (1714–1788), the most prominent keyboard player and composer of mid-18th century. The result shows that a number of keyboard works without specific instrument designations nevertheless show signs of being intended for a special kind of instrument (clavichord, harpsichord or organ).

This project is linked to another large-scale project within GOArt (see background information on p. 58), which involves the collecting of historical keyboard



Fig. 7. The Gerstenberg reconstructed pedal clavichord.
Photo: Lasse Lindkvist, Göteborg.

instruments (clavichords, harpsichords and fortepianos) and also research on performance practice. The ultimate aim of this project is to create a research center including a museum of restored and reconstructed keyboard instruments.

Romantic Organ Performance Practice: the Importance of Sound

The research on Romantic organ performance practice is still very new. Because of this, the main aim of the project is to formulate a general performance practice for the period, mainly based on the study of primary sources, where both common features, and changes and differences rooted in distinctive national traditions or differing aesthetical standpoints, are elucidated.

The research will take into account not only notated music but also improvisation. In the latter case the task will be to formulate the musical language that forms the basis of composition during the period. The results of the investigations are applied and tried out in the form of case studies of selected organ works of some of the most prominent composers of the period, including Mendelssohn, Liszt, Franck and Reger.

One focus is the organ music of Otto Olsson (1879–1964), the leading figure of the Swedish late Romantic organ school. The emphasis of this research (by Sverker Jullander) has been on aspects of *sonority and registration*. This is a central issue in the study of late Romantic organ music, as in the latter part of the 19th century a profound change in organ aesthetics took place under the influence of the symphonic orchestra. Also technical developments greatly contributed to increasing the complexity both of the organs and of the registration practice of the time. The interrelationship of instrument and music is, in this context, of crucial importance. Registration indications, annotations and sound recordings have been analyzed with the aim of formulating, in general terms, Otto Olsson's registration practice. The latter will then be applied to a number of works on Swedish organs from the period still preserved in their original condition.

Currents In Organ Music 1945-1970: In Search of a New Language for the Organ

The development of organ music after the Second World War shows a varied picture. On the one hand many composers still stick to fairly traditional modes of expression. On the other hand, from the sixties onward, there is a new wave of experimental compositions, whose roots are to be found in the modernist aesthetics developed in the early post-war years at the famous summer courses in Darmstadt.

During the first year, the research within this field has focused on the still productive Czech composer, Petr Eben (b. 1929). The focus of the Eben research (Johannes Landgren) is the interrelationship of improvisation and composition in his organ music. One special object of study is the organ cycle "Job," which originated as improvised, non-written music, performed publicly by the composer on several occasions. With the aid of tape recordings, the path is traced from the original improvisation through the intermediate stages of the improvised performances to the finished score. This study is expected to shed light on problems concerning compositional aesthetics, interpretation and improvisation teaching.

Documentation

The size and many-sided character of the research programme necessitates a flexibly organized, space-economical and easily accessible documentation with a variety of storage forms, including CD-ROM and video. The documentation contains various kinds of data forming the foundation and point of departure of the research, and the results yielded by the different research projects.

During the first year of the programme much effort has been devoted to *instrument documentation* (Carl-Gustaf Lewenhaupt, Munetaka Yokota, Carl-Johan Bergsten). This documentation concentrates on a selection of historical organs that are well preserved, date from the most important periods of organ history and are relevant to the research within the programme. A large amount of data has already been collected. The documentation includes drawings of all parts of the wind system, the wind chests and the action systems, as well as many different measurements of each pipe. The work is carried out on an unprecedented level of detail: it involves parameters that have never before been subject to documentation and has required the development of new documentation methods, including the use of ultrasonic tools.

A *research documentation system* is under construction (Paul Peeters). This consists of:

1. a *library* with books, organ music scores, microfilms of important music manuscripts, sound recordings, pictures, drawings, etc. The cornerstone of the library is an important collection of organ literature, the Gunnar Wahlström collection, which has recently been purchased.
2. a *computer database*, which will include documentation of all musicological, organological and scientific research within the programme, as well as technical documentation of relevant organs. The development of the database is expected to be completed at the beginning of 1996.

Results of the research within the programme are published in scientific and scholarly journals (see list of publications below). However, the unique, holistic approach of the programme, in combination with the fact that there is not yet any publication with a correspondingly wide scope, makes an additional forum necessary. Therefore the *Göteborg Organ Art Center Yearbook* has been created, whose first issue is scheduled for the spring of 1996. An Internet edition of the Yearbook is also planned.

Publications¹⁾

Articles:

- Davidsson, Hans: "The North German Organ Project," in: *Svensk Tidskrift för Musikforskning* 1993:1
- Friesel, Milan: "Studies on Composition and Microstructure of Historical and Modern Lead-Tin Alloys for Organ Pipes," in: *GOArt Yearbook* (forthcoming)
- Granhäll, Tord; Gustafsson, Bror-Arne: *Some Unsteady Flow Phenomena in Wind Supply Systems of Pipe Organs*, Parts I and II (report, available at Chalmers University of Technology, Department of Thermo and Fluid Dynamics, Göteborg)
- Jullander, Sverker: "Till Gustav Vasa-orgelns tidiga historia," in: *Orgelforum* 2/1994 and 3/1994.
- Jullander, Sverker: "French and German Influences in the Organ Music of Otto Olsson," in: *Proceedings of the Göteborg International Organ Academy 1994*, eds. H. Davidsson and S. Jullander, Göteborg 1995.
- Kropp, Wolfgang: "Time Domain Formulation of the Sound Generation Mechanism of Organ Pipes," in: *Acta Acustica* (forthcoming)
- Landgren, Johannes: "Petr Ebens orgelmusik – en översikt," in: *Orgelforum* 4/1993.
- Speerstra, Joel: "Towards an Identification of the Clavichord Repertoire in the Solo Keyboard Works of C. P. E. Bach," in: *De Clavichordio: Proceedings of the International Clavichord Symposium Magnano 1995*, ed. Bernard Brauchli, Susan Brauchli, (forthcoming).

¹⁾ Only publications related to the research programme and written (recorded) by researchers involved in the programme have been included.

Books:

Davidsson, Hans: *Matthias Weckmann: the Interpretation of His Organ Music*, Vols. I-III, Göteborg 1991

Davidsson, Hans; Jullander, Sverker (eds.): *Proceedings of the Göteborg International Organ Academy 1994*, Göteborg 1995

Granhäll, Tord: *Some Unsteady Flow Phenomena in Wind Supply Systems of Pipe Organs* (Licentiate thesis, available at Chalmers University of Technology, Department of Thermo and Fluid Dynamics, Göteborg)

Jullander, Sverker (ed.): *Proceedings of the Weckmann Symposium*, Göteborg 1993

CDs:

Matthias Weckmann Organ Works. Hans Davidsson, organ (Motette 1991)

A Composer Portrait (Petr Eben). Johannes Landgren, conductor and organ (Opus 3 1993)

Petr Eben: Bittere Erde. Johannes Landgren, conductor and organ (Opus 3 1995)

Petr Eben: Te Deum. Johannes Landgren, conductor and organ (Opus 3 1995)

An Organ Portrait. William Porter, organ (Proprius 1993)

Gustavus Rex & Christina Regina. Hans Davidsson, conductor and organ (Musica Sveciæ 1994)

For a number of years, a tabular overview of the distribution of grants in the past financial year and the period in which the Foundation has been active (1965-95) has been presented. Owing to the addition of more donations over the past few years, comparison between one year and another has become more difficult. Tables 1-8 include only particulars concerning the Bank of Sweden's original Tercentenary Donation, and Tables 9-10 give information on grants applied for and approved from the Humanities and Social Science Donation.

Statistical information on research grants

The distribution of grants between subject fields for 1995 may be seen in Tables 1 and 6. Information on the ratio between continuation grants and new grants in 1995 is reported in Tables 2 and 3. The distribution among different faculty areas for these types of grant is shown in Tables 4 and 5.

Several of the projects receiving grants, especially the larger ones, are of a multidisciplinary or interdisciplinary character. For this reason, it is not possible to give an exact breakdown by subject or faculty field. The grants are listed under the subject considered most central, generally that in which the co-ordinating researcher is engaged. In all essentials, the tables provide a correct description of the focus of the Foundation's activities.

The Bank of Sweden Donation

Table 1.

Applications and grants approved, 1995 (SEK '000)

Subject area	Grants approved		Applications		Grants approved as % of		
	No.	Amount	No.	Amount	for applied	for applied	subject area
Social science	77	36,401	264	192,190	18.9	29.2	52.2
Economic history	5	2,378	10	8,448	28.1	50.0	3.4
Business economics	9	5,036	29	23,868	21.1	31.0	7.2
Economics	11	5,774	32	28,567	20.2	34.4	8.3
Culture geography	4	2,470	13	10,293	24.0	30.8	3.5
Educational theory	4	2,310	19	13,491	17.1	21.1	3.3
Psychology	16	6,925	41	26,134	26.5	39.0	9.9
Sociology	3	1,820	36	28,782	6.3	8.3	2.6
Anthropology	0	0	5	2,911	0.0	0.0	0.0
Statistics	3	1,098	7	7,610	14.4	42.9	1.6
Political Science	14	6,437	32	21,199	30.4	43.8	9.2
Law	8	2,153	40	20,887	10.3	20.0	3.1
Humanities	28	13,796	138	93,690	14.7	20.3	19.8
Medicine	23	10,751	60	47,587	22.6	38.3	15.4
Natural science	12	5,554	33	22,695	24.5	36.4	8.0
Technology	3	1,243	10	8,792	14.1	30.0	1.8
Miscellaneous	5	1,946	5	1,093	178.0	100.0	2.8
Project grants, total	148	69,691	510	366,047	19.0	29.0	100.0
Travel grants, salary increments, sector committees		1,000					
Grants for research, total	148	70,691					

Table 2.

Continuation grants/New grants, 1995 (SEK '000)

Type of application	Grants approved		Applications		Grants approved as % of		
	No.	Amount	No.	Amount	for applied	for applied	type of grant
Continuation grants	114	52,696	123	81,236	64.9	92.7	75.6
New grants	34	16,995	387	284,812	6.0	8.8	24.4
Total	148	69,691	510	366,048	19.0	29.0	100.0

Table 3.

Distribution of grants approved, 1995 (SEK '000)

	Continuation grants		New grants	
	No.	Amount	No.	Amount
Final grants	35	16,530		
Publication guarantees	8	498	Planning grants	3 800
Miscellaneous grants	71	35,668	Lump-sum grants	0 0
			Miscellaneous grants	31 16,195
Summa	114	52,696	34	16,995

Table 4.

Continuation grants, by faculty area, 1995 (SEK '000)

Faculty area	Grants approved		Applications		Grants approved as % of		
	No.	Amount	No.	Amount	for applied	for applied	faculty area
Social science	56	26,608	59	40,139	66.3	94.9	50.5
Humanities	21	9,497	23	12,685	74.9	91.3	18.0
Medicine	13	8,383	19	16,132	52.0	94.7	15.9
Natural science	12	5,554	15	10,545	52.7	80.0	10.5
Technology	3	1,243	3	1,459	85.2	100.0	2.4
Miscellaneous	4	1,411	4	276	51.2	100.0	2.7
Total	114	52,696	123	81,236	64.9	92.7	100.0

Table 5.

New grants, by faculty area 1995 (SEK '000)

Faculty area	Grants approved		Applications		Grants approved as % of		
	No.	Amount	No.	Amount	for applied	for applied	faculty area
Social science	21	9,793	214	157,127	6.2	9.8	57.6
Humanities	7	4,299	106	75,930	5.7	6.6	25.3
Medicine	5	2,368	41	31,455	7.5	12.2	13.9
Natural science	0	0	18	12,150	0.0	0.0	0.0
Technology	0	0	7	7,333	0.0	0.0	0.0
Miscellaneous	1	535	1	817	65.5	100.0	3.2
Total	34	16,995	387	284,812	6.0	8.8	100.0

Humanities and Social Science Donation

Table 6.

Applications and grants approved, 1995 (SEK '000)

Subject area	Grants approved		Applications		Grants approved as % of		
	No.	Amount	No.	Amount	amount number applied	Per applied	subject area
Social science	5	7,500	110	154,430	4.9	4.5	23.0
Humanities	7	15,500	83	124,038	12.5	9.5	47.5
Technology	3	5,800	11	19,928	29.1	27.3	17.8
Miscellaneous	3	3,825	3	3,846	99.4	100.0	11.7
Project grants. total	18	32,625	207	302,242	10.8	9.1	100.0
Continuation grants	10	16,200					
Symposium support etc.		4,978					
Grants for research total		53,803					

Table 7.

New grants approved, by administering institution, 1995 (SEK '000)

Grant administrator	No.	Amount	%
Umeå University	1	2,000	6.1
Uppsala University	2	4,300	13.2
Stockholm University	5	9,300	28.5
Royal Institute of Technology	3	5,800	17.8
Linköping University	1	1,700	5.2
Gothenburg University	1	1,600	4.9
Lund University	3	4,100	12.6
Central Board of National Antiquities	1	3,000	9.2
Royal Library	1	285	0.9
National Museum of Ethnography	1	540	1.6
Total	19¹⁾	32,625	100

¹⁾ One project is being conducted jointly by the Linguistics Departments at the Universities of Stockholm and Uppsala. The funds are therefore assigned to both these educational institutions.

Research reviews and documentation from symposia, conferences, etc arranged by the Bank of Sweden Tercentenary Foundation are published either in series form or as independent publications.

Staff at the Foundation's office will gladly supply information about the contents of the publications, as well as the addresses to which orders should be sent.

The titles given here are translations of the original Swedish titles. Only those publications followed by an "in English" entry are available in English.

The following titles have appeared to date in the series:

- RJ 1977:1 Working life, economics and the evolution of welfare
 RJ 1977:2 Listen, look, read
 RJ 1977:3 Hello! Hello!
 RJ 1978:1 Where do the strings lead?
 RJ 1978:2 Threat or promise?
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 RJ 1980:2 Current research on women
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 RJ 1980:4 Equality perspectives in research
 RJ 1980:5 Communication – despite disability
 RJ 1980:6 Research on taxation
 RJ 1981:1 Swedish research on taxation 1919-1979
 RJ 1981:2 The life of women in Swedish society
 RJ 1982:1 The risk of becoming an alcoholic
 RJ 1982:2 Directly contrary to accepted standards
 RJ 1982:3 Changing one's way of life
 RJ 1983:1 Women and men in Swedish society (in English)
 RJ 1983:2 How are we going to cope with 1990?
 RJ 1984:1 Alcohol policy and research
 RJ 1984:2 Eastern bloc research in Sweden 1950-1983
 RJ 1985:1 Research on taxes
 RJ 1986:1 Taxes – a problem for society?
 RJ 1986:2 Finance theory investigations
 RJ 1987:1 Technology and employment in the future
 RJ 1987:2 Social science and humanities research on sport
 RJ 1988:1 Research in aesthetic subjects
 RJ 1989:1 The Swedish Riksdag in an international perspective (in English)

Publications by the Foundation

Other publications to date are:

- Riksdagen genom tiderna (The Riksdag through the ages). H. Schück, G. Rystad, M.F. Metcalf, S. Carlsson & N. Stjernquist (1985)
 The Riksdag: A History of the Swedish Parliament. H. Schück, G. Rystad, M.F. Metcalf, S. Carlsson & N. Stjernquist (1987)
 Forskning i ett föränderligt samhälle, Stiftelsen Riksbankens Jubileumsfond 1965-1990. Edited by Kjell Härnqvist and Nils-Eric Svensson, Gidlunds Bokförlag (1990)
 Swedish research in a changing society, The Bank of Sweden Tercentenary Foundation 1965-1990. Edited by Kjell Härnqvist and Nils-Eric Svensson, Gidlunds Bokförlag (1990)
 Riksdagen inifrån. Tolv riksdagsledamöters hägkomster, erfarenheter och lärdomar (The Riksdag on the inside. Twelve Members of Parliament recollect their experiences and the lessons they learned). Edited by Nils Stjernquist, Gidlunds Bokförlag (1991)
 Att åldras (Growing old). Report from a symposium on ageing and on age-related diseases. Editor: Bengt Pernow, Gidlunds Bokförlag (1992)
 Riksdagen genom tiderna (The Riksdag through the ages). H. Schück, G. Rystad, M.F. Metcalf, S. Carlsson & N. Stjernquist. Second edition (1992)
 Europa – historiens återkomst (Europe – the return of history). Editor: Sven Tägil, Gidlunds Bokförlag (1992)
 Research Funding and Quality Assurance. A symposium in honour of Nils-Eric Svensson. Gidlunds Bokförlag (1993)
 Bengt Wieslander: The Parliamentary Ombudsman in Sweden. Gidlunds Bokförlag (1994)
 Bengt Wieslander: JO-ämbetet i Sverige. Gidlunds Bokförlag (1995)
 Parlamentarismen i de nordiska länderna. En egen modell? ("Parliamentarism in the Nordic Countries. A distinctive model?" Ed. Nils Stjernquist, Gidlunds Bokförlag (1995)
 Liv·Verk·Tid·Till biografiskrivandets renässans. ("Life·Works·Times·For the Renaissance of Biography"). Book issued in co-operation with the Royal Academy of Music (publication series No. 82). Tabergs tryckeri AB (1995)

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