The Wittgenstein Archives at the University of Bergen:
Project Report 1990-1993
and
Critical Evaluation

Wittgensteinarkivet ved Universitetet i Bergen

Wittgensteinarkivet er et forskningsprosjekt ved Filosofisk institutt ved Universitetet i Bergen. Prosjektet ble startet 1. Juni 1990. Dets hoved-målsetting er å gjøre Ludwig Wittgensteins etterlatte skrifter (Nachlaß) tilgjengelige for forskning. Wittgensteinarkivet produserer derfor en komplett, maskinleselig versjon av Wittgensteins Nachlaß og utvikler pro-gramvare for presentasjon og analyse av tekstene.

I samarbeid med Wittgenstein Trustees og Oxford University Press arbeides det med sikte på å publisere Nachlaß i elektronisk form. Hele Nachlaß vil først bli publisert i elektronisk faksimile på CD-ROM. Faksimilen vil der-etter bli supplert med transkripsjoner fra Wittgensteinarkivet. I mel-lomtiden har gjesteforskere ved Wittgensteinarkivet adgang til transkripsjoner og programvare under bearbeidelse samt en fullstendig kopi av Nachlaß.

The Wittgenstein Archives at the University of Bergen

The Wittgenstein Archives is a research project at the Department of Phi-losophy at the University of Bergen, Norway. Established in June 1990, its main purpose is to make Ludwig Wittgenstein's collected writings (Nachlaß) available for research. To serve this purpose, the Wittgenstein Archives is producing a machine-readable transcription of Wittgenstein's Nachlaß, and will supply tools for computer-assisted display and analysis of the textual corpus.

In cooperation with the Wittgenstein Trustees and Oxford University Press, the Nachlaß will be published in electronic form. The entire Nachlaß will first be published as an electronic facsimile on CD-ROM. This facsimile will then be supplemented by transcriptions prepared at the Wit-tgenstein Archives. In the meantime, visiting scholars to the Wittgen-stein Archives have access to the texts and tools prepared by the project as well as to a complete copy of Wittgenstein's Nachlaß.

Working papers from the Wittgenstein Archives at the University of Bergen

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Bergen 1995

Contents

Preface

The Wittgenstein Archives at the University of Bergen was the brainchild of Claus Huitfeldt, the present Project Director. Although few may have fully understood the potential value of his proposal to institutionalize a major project with the aim of making all of Ludwig Wittgenstein's manuscripts and type-scripts, his *Nachlaß*, available in machine-readable form, the council of the Faculty of Arts and the Senate of the University of Bergen were persuaded to give it a try and The Wittgenstein Archives was established in June 1990 for an initial trial period of three and a half years.

One reason for the uncertainty concerning the feasibility of the project was an earlier attempt, The Norwegian Wittgenstein Project, which had run aground in spite of the efforts and good intentions of its participants. The Norwegian Wittgenstein Project was a cooperative effort of the Departments of Philosophy of the four Norwegian universities with the support of the Norwegian Research Council. The Wittgenstein Archives is indebted to this earlier project both for the original concept and for some of its completed transcriptions.

It was clear from the outset that this project could only be realized with the full understanding and cooperation of the Wittgenstein Trustee12s, and the success of our undertaking is indebted to Professor G.E.M Anscombe (Cambridge), Sir Anthony Kenny (Oxford), Professor Peter Winch (Urbana-Champaign, Illinois) and Professor Georg Henrik von Wright (Helsinki) for their unfailing support.

The condition laid down for continuing the project beyond its initial phase was a positive evaluation to be undertaken by an international group of scholars. The Council of the Faculty of Arts asked Professor Rudolf Haller (Karl-Franzens-Universität Graz), Dr. Allen Renear (Brown University), Professor Kurt Erich Schöndorf (University of Oslo) and Mr Paul Stray (University of Tromsø) to prepare a report on the quality of The Wittgenstein Archives, and their thorough and positive report

formed the basis for the University's decision to go on with the project. We have good reason to be grateful for the work done by these four scholars on our behalf.

Initially, The Wittgenstein Archives was only concerned with the creation of a machine-readable text and the development of software for the presentation and analysis of such a text. However, in cooperation with Oxford University Press through its representative Dr. Andrew Rosenheim, the publication of the machine-readable text as well as an electronic facsimile edition of the original manuscripts and typescripts on CD-ROM are now among our central concerns. We are very pleased with the close cooperation between The Wittgenstein Archives and Oxford University Press.

A project with the ambitions of The Wittgenstein Archives inevitably costs more money than is normally available through the limited budgets of university departments. The Wittgenstein Archives has, to slightly revise the words of one of Tennessee Williams' memorable characters, had to depend on the kindness of friends. In addition to the generosity of the Senate and the Faculty of Arts of the University of Bergen, The Wittgenstein Archives has received support from the Meltzer Foundation, the Nansen Foundation and the Norwegian Research Council. Without their active interest our work could not have been done.

But donations do not make a project. Someone has to do the work. And The Wittgenstein Archives owes its achievements to the dedication of Astrid Castell, Peter Cripps, Dinda L. Gorlée, Claus Huitfeldt, Ole Letnes, Frank Meyer, Alois Pichler, Maria Sollohub, and Ilse Somavilla, who have been with us for all or part of the first phase of the project.

On completion, The Wittgenstein Archives is planned to become a part of the Department of Philosophy, and from the very beginning our work has depended on our good relations with this department.

While a project such as ours naturally depends on the good will and generosity of a large number of individuals and institutions, there are nevertheless three who deserve to be mentioned in conclusion for their untiring faith in our work and their readiness to help us find practical and financial solutions in times of need. Without the active involvement of Professor Ole Didrik Lærum, Rector of the University of Bergen, Mr Kåre Rommetveit, Director of the University of Bergen, and Mr Asbjørn Bjørnset, Director of the Faculty of Arts, The Wittgenstein Archives would not have been in the healthy and active state that we now can claim it is.

For the Board of the Wittgenstein Archives

Orm Øverland

Chair

Bergen, January 1995

**Part I:
Project report for the first project period
(1990-1993) of The
Wittgenstein Archives at the University of Bergen**

1.   Introduction

The aims of The Wittgenstein Archives at the University of Bergen include the transcription of the entire Wittgenstein *Nachlaß* into machine-readable form, the development of software for the presentation and analysis of the texts, the provision of access to the machine-readable transcriptions for visitors and scholars at the University of Bergen, and the publication of an electronic facsimile and machine-readable transcriptions of Wittgenstein's *Nachlaß* on CD-ROM.

This part of the report will follow the progress of The Wittgenstein Archives at the University of Bergen during its first project period 1990-1993. The introduction will be followed by an outline of the background of the project. The subsequent third section of the report will provide a detailed description of the development of the project during the first project period, while the fourth and final section will give an overview of the plans for the second project period, which started 01.01.94.

Ludwig Wittgenstein's *Nachlaß* consists of approximately 20,000 pages of manuscripts and typescripts. By the end of the first project period, The Wittgenstein Archives had converted over a third of this material to machine-readable form. Wittgenstein often edited his manuscripts several times and they are full of deletions, corrections, alternatives, insertions, cross-references etc. In order to reproduce the texts as completely as possible The Wittgenstein Archives has developed its own registration standard (code system), which provides the basis for specially designed software that offers a wide range of opportunities for presentation and analysis of the texts. It is intended that the machine-readable transcriptions produced by The Wittgenstein Archives will complement the electronic facsimile of the *Nachlaß* now being worked on in cooperation with Oxford University Press.

In the meantime, visiting researchers are permitted to work at The Wittgenstein Archives and make use of the machine-readable transcriptions prepared by the project. They also have access to a complete collection of copies of Wittgenstein's *Nachlaß*. Scholars wishing to undertake research at The Wittgenstein Archives must obtain written permission in advance and are required to sign a contract relating to copyright regulations on their arrival in Bergen. The Wittgenstein Archives has received a large number of visiting researchers from various parts of the world during the last three years.

The Wittgenstein Archives is organised as a research project at the Department of Philosophy at the University of Bergen. The project is partially financed by external sources and has its own budget and board. During the first project period the University of Bergen received financial support for the project from the Meltzer Fund, Bergen; the Nansen Fund, Oslo; and the Norwegian Research Council for the Sciences and the Humanities (NAVF)[1].

From the start of the project until September 1993 The Wittgenstein Archives had a staff of three or four employees, while during the last three months of the first project period The Wittgenstein Archives enjoyed a staff of six employees.

The Wittgenstein Archives has now progressed into its second project period, where the completion of transcription work and the publication of an electronic facsimile of the *Nachlaß* have highest priority. The agreed publisher is Oxford University Press.

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1. NAVF is now called NFR (Norwegian Research Council)

2.   Background

2.1   Ludwig Wittgenstein's Nachlaß

Current interest in the ideas of the Austrian philosopher Ludwig Wittgenstein (1889-1951) is not limited to philosophy. His views receive continuous attention and are also widely discussed within fields such as psychology, computer science, logic and mathematics, as well as in the literary and linguistic disciplines and the social sciences.

Wittgenstein's *Nachlaß* consists of approximately 20,000 pages of unpublished writings which Wittgenstein left behind on his death in 1951.[1] In his will, Wittgenstein gave his friends and colleagues G.E.M Anscombe, Rush Rhees and Georg Henrik von Wright, all the copyright in his unpublished writings.[2]

Beginning with the publication of *Philosophical Investigations* in 1953, parts of the *Nachlaß* were subsequently published in book form by or under the auspices of the Trustees. Together with the *Tractatus*, these books have provided the foundation for Wittgenstein's world-wide recognition as one of the most significant and influential philosophers of our century. Over two thirds of Wittgenstein's *Nachlaß*, however, is still unpublished.[3]

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1. The term *Nachlaß* is used here to refer to the philosophical manuscripts, typescripts and dictations listed in Georg Henrik von Wright's catalogue, first published in *Philosophical Review* 78 pp. 483-503. It does not include Wittgenstein's private correspondence and unauthorised dictations, lecture notes etc. These are currently being collected and catalogued by The *Brenner Archives* at the *University of Innsbruck*.
2. In 1969 a deed of trust was signed between Wittgenstein's three literary heirs and Trinity College, Cambridge. By this deed the Wittgenstein papers were to be given to Trinity, while the copyright was to be held by the literary heirs. The copyright-holders of Wittgenstein's *Nachlaß* are referred to as the Wittgenstein Trustees and are referred to as such in this report. Rush Rhees died in 1989 and Peter Winch was appointed a trustee in May 1990. Anthony Kenny also became a trustee in 1990.

This fact is hardly surprising, considering the extent to which Wittgenstein's manuscripts teem with deletions, corrections, alternatives, insertions, cross-references etc., and the fact that he revised several of his manuscripts many times; so that many of the texts are more or less reworked versions of other texts. To edit this material for publication is therefore an extremely demanding task - both in scholarly and economic terms.

Most of the original manuscripts comprising Wittgenstein's *Nachlaß* are held by the Trinity College Library in Cambridge, a substantial part is held by the Austrian National Library in Vienna, and the rest by the Bodleian Library in Oxford and The Bertrand Russell Archive in Hamilton, Ontario.

In 1967 the parts of Wittgenstein's *Nachlaß* which were known to the Trustees by that time were microfilmed at Cornell University, New York. Copies of this microfilm have since been acquired by a large number of university libraries throughout the world. The Cornell copy, however, is neither of the highest quality nor complete. It lacks pages and does not contain those parts of Wittgenstein's writings which have been brought to light since 1967.

In the 1970's a cooperation was established between the Trustees and a research group at the University of Tübingen. The project was directed by H.J. Heringer and M. Nedo, and the purpose was to lay the foundation for a complete and authoritative printed edition of Wittgenstein's *Nachlaß*. The project never completed its task and was discontinued in 1980, before its efforts had resulted in any publications. Since 1980 Nedo has been in Cambridge and has continued to work on a printed edition of the *Nachlaß.* He has the permission of the Wittgenstein Trustees to publish certain parts of the *Nachlaß*

3. According to Pichler, publications have been made from approximately one quarter to one third of the *Nachlaß material*. Cf. p.12, M. Biggs and A. Pichler: *Wittgenstein: Two Source Catalogues and a Bibliography* in: Working Papers from The Wittgenstein Archives at the University of Bergen. No. 7, Bergen 1993.

and in 1993 the Springer Verlag, Vienna, announced the forth-coming *Wiener Ausgabe*, beginning with an introductory volume which was published in the autumn of 1993.

2.2   The Norwegian Wittgenstein Project

In Norway, the work of preparing Wittgenstein's *Nachlaß* started in 1981 when The Norwegian Wittgenstein Project was established. This project was a cooperative effort between the departments of philosophy of the four Norwegian universities. From 1984 the project was administered by the Norwegian Computing Centre for the Humanities. The project was financed exclusively by Norwegian sources and mainly by the Norwegian Research Council for the Sciences and the Humanities.

The purpose of the project was not publication, but conversion of the texts to machine-readable form, i.e. adapted for computer use. The Norwegian Wittgenstein Project resulted in the transcription of approx. 3,200 pages and the development of specialised software for presentation, indexing and searching the material. In 1984 the project received additional material of more than 4,000 pages from members of the former Tübingen project, but the rights to this material were contested and the material was never used.

In addition, the project had not secured the rights to copy and distribute its own material. Without such rights, it turned out to be impossible to finance continued activities. Hence, The Norwegian Wittgenstein Project was terminated in 1987, without any of its products having been made generally accessible to researchers.[1]

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1.   For more information on The Norwegian Wittgenstein Project, see Claus Huitfeldt and Viggo Rossvær: *The Norwegian Wittgenstein Project. Report 1988*. No. 44 in the report series of the Norwegian Computing Centre for the Humanities (ISBN 82-7283-052-3).

2.3   Establishment of The Wittgenstein Archives at the University of Bergen

In September 1989 *Claus Huitfeldt*, director of The Norwegian Wittgenstein Project in the period 1985-87, contacted the Director of the University of Bergen and suggested the establishment of a project which would preserve the results of The Norwegian Wittgenstein Project and continue the work of producing machine-readable transcriptions of Wittgenstein's *Nachlaß*. The pre-condition for the establishment of such a project was that the right to give scholars access to the transcriptions should be obtained in advance from Wittgenstein's Trustees.

On the basis of discussions of the proposal at the Department of Philosophy (02.11.89) and at the Faculty of Arts (14.11.89), the Senate of the University of Bergen decided (24.11.89) to establish an interim committee to prepare a proposition for debate.

The interim committee consisted of Orm Øverland, Department of English; Tore Nordenstam, Department of Philosophy; Ivar Utne, Department of Scandinavian Languages and Literature; Oddmund Søilen, Central University Administration; and Claus Huitfeldt, Department of Philosophy. Øverland chaired the interim committee, and Huitfeldt served as secretary.

In a letter of 12.01.90 the interim committee informed the Wittgenstein Trustees of the proposed plans and asked for their permission to produce a machine-readable version of the entire Wittgenstein *Nachlaß*, as well as to give scholars at the University of Bergen and its visitors access to the transcriptions stored in machine-readable form on location in Bergen. Copies of the transcriptions produced in Bergen would not be distributed to other parties, and it was made clear that neither publication nor commercial use of the transcriptions was presupposed. The Trustees granted their permission in a letter to the committee dated 23.01.90. Georg Henrik von Wright vis-

ited the University of Bergen in early April 1990 and was given a detailed presentation of the plans for the project.

The interim committee also approached the Norwegian Research Council for the Sciences and the Humanities with the request that the material from The Norwegian Wittgenstein Project, i.e. the project's own production of transcribed material amounting to some 3,200 pages, software and documentation, be transferred to The Wittgenstein Archives. This request was accepted by the Research Council in a letter dated 11.01.90.

The interim committee also applied to the Research Council, the Meltzer Fund and the Nansen Fund for financial support.

Simultaneously with the preliminary work, Claus Huitfeldt prepared a draft for a new registration standard (cf. 3.8.1) and started work on systems development.

The interim committee presented its project plan 26.02.90. The plan was acknowledged by the Faculty of Arts 19.04.90 and was finally accepted by the University Senate in session 03.05.90.[1]

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1. The Senate's decision and the project plan are presented in full in the Project report for 1990, T*he Wittgenstein Archives at the University of Bergen: Background, Project Plan, and Annual Report 1990* in: Working Papers from The Wittgenstein Archives at the University of Bergen. No. 2, 1991. Cf. also 3.1 below.

3.   Detailed report for the period 1990-1993

3.1   Objectives and Project Plan

The project plan endorsed by the Academic Senate 03.05.90 states that

> The primary objectives of the project are:
>
> - to produce a complete, machine-readable version of Ludwig Wittgenstein's Nachlaß
> - to develop software for presentation and computer-assisted text analysis for scholarly work
> - to make the machine-readable texts and analysis tools available to faculty members at the University of Bergen and to visiting scholars
>
> The secondary objectives are:
>
> - to develop general competence and generally applicable systems of registration and software for preparation, treatment and analysis of primary texts
> - to contribute to an increase in cooperation between the relevant scholarly milieus at the University of Bergen and international Wittgenstein research
> - to establish and develop cooperation between the professional computer milieus at the Faculty of Arts at the University of Bergen and national and international groups of computer users in related disciplines, particularly within the program known as the Text Encoding Initiative.

According to this plan, the project was to employ a director and one other staff member on a full-time basis and a further staff member on a part-time basis throughout the first three and a half years (01.06.90 -31.12.93), during which time one

would "complete the most significant elements of the system software and approx. 7,500 pages of text."

 The plan concluded that:

> By the end of the project period, the following texts are to be available in transcribed and finished form: Catalogue nos. 105-22, 129-30, 147, 162b, 171, 173, 175-77, 213 and 228-30.
>
> The project will have taken a little less than 9 workyears, a little more than one half of which will have gone into administration, system development and research, and the rest for textual treatment proper (transcription, first proof-reading and quality control).

The plan estimated that to complete the project would require eight man years for computerising and preparing the remainder of the *Nachlaß*, and that this could be achieved through a two and a half year extension of the project. The Academic Senate decided that the question of an extension of the project would be decided on the basis of, among other things, a external evaluation of the activities of The Wittgenstein Archives.

It should be mentioned here that in the course of the project period the University endorsed an expansion of the objectives of the project: Following an extension of the agreement with the Wittgenstein Trustees (cf. 3.4) The Wittgenstein Archives not only aimed at producing a transcription which would be made available on location in Bergen, but also at publishing these transcriptions in electronic form, as well as publishing an electronic facsimile of the entire *Nachlaß*. (cf. 3.4 and 3.5)

3.2 Project Board and Organisational Framework

The Wittgenstein Archives is organised as a research project at the Department of Philosophy. The project is partially financed by external sources and has its own budget and board. The board reports to the Faculty of Arts and the Academic Senate.

The Project Board had the same membership throughout the first project period:

Hilde H. Bretvin	Office Manager, University Senate Secretariat
Kjell S. Johannessen	Professor, Department of Philosophy
Knut I. Jonassen	Director, Norwegian Term Bank
Tore Nordenstam	Professor, Department of Philosophy
Beatrice Sandberg	Professor, Department of German
Orm Øverland	Professor, Department of English

Sandberg was Chairman of the Board from 29.05.90 until 31.12.91. Øverland took over as Chairman of the Board from 01.01.92. Nordenstam has been project supervisor for the Department of Philosophy.

The board had ten meetings during the first project period.

3.3 Personnel

3.3.1 Employees

Staff members during the first project period of The Wittgenstein Archives, i.e. from 01.06.90 to 31.12.93 were, in alphabetical order: Astrid Castell (September 1991 - June 1992), Peter Cripps (June - December 1993), Dinda L. Gorlée (August 1990 - March 1991), Claus Huitfeldt (Project Director, June 1990 - December 1993), Ole Letnes (August 1991 - June 1993), Frank Meyer (September - December 1993), Alois Pichler (September 1990 - December 1993), Maria Sollohub (September -December 1993) and Ilse Somavilla (September - December 1993).

The Wittgenstein Archives thereby enjoyed an international staff throughout the period, with the following nationalities represented: Austrian, British, Dutch, German, Italian and Norwegian.

Additional work time was contributed to The Wittgenstein Archives, on an hourly basis or as part of paid commissions, by staff of The Norwegian Term Bank, The Norwegian Computing Centre for the Humanities, and others.

A total of approximately ten and a half work-years was associated with the project in the first project period. Slightly more than half of this was spent on management, administration and systems development, the rest on work directly associated with preparation of texts.

For a full overview of personnel, dates and work time, cf. Appendix A.

3.3.2 Division of responsibilities

<u>Castell</u> was employed at The Wittgenstein Archives from September 1991 until June 1992. Her responsibilities included filing, purchasing, following up of budget and accounts, and contact with the personnel department. Castell also did some transcription work.

<u>Cripps</u> joined the staff of The Wittgenstein Archives in July 1993, on the departure of Letnes. His primary task has been the transcription and proof-reading of texts and he was actively involved in the introduction of Meyer and Somavilla to transcription work in the autumn of 1993.

<u>Gorlée</u> was a permanent member of staff at the Department of Romance Languages and Literature, University of Bergen, until 1991. From 01.08.90, the Faculty of Arts permitted her to spend 50% of her time working for The Wittgenstein Archives. Her contribution to the project in 1990 and 1991 included linguistic assistance related to the establishment of the registra-

tion standard and assistance with contacts and correspondence in English.

Huitfeldt, director of The Wittgenstein Archives, has throughout the project period had responsibility for the management and administration of the project, including correspondence, applications for grants and international contacts, as well as for the project's scholarly activities such as the development and maintenance of the registration standard (MECS-WIT) and of software and computer methods. An exception was December 1991 and the autumn term of 1992 when Huitfeldt was on leave and Ole Letnes was functioning as director. Until July 1993 Huitfeldt's primary employment was as a research fellow for the Norwegian Research Council for the Sciences and the Humanities. Since then he has been directly employed by the University of Bergen.

Letnes was employed at The Wittgenstein Archives from August 1991 until June 1993. He participated in revising and improving the registration standard and was involved in transcription and proof-reading work, as well as international contacts and administration. In the periods December 1991 and August - December 1992 he functioned as project director.

Meyer was employed at The Wittgenstein Archives from September 1993 until January 1994, when his primary task was transcription of texts.

Pichler was on the staff of The Wittgenstein Archives for the whole of the first project period (from September 1990). His initial responsibilities included participation in the establishment of the registration standard, carrying out pilot transcriptions, cataloguing and completing primary source material. As the project developed, Pichler was involved in the completion and revision of the registration standard, transcription work, proof-reading and international contacts. From the beginning of January 1993, Pichler went from a full-time to a part-time position at The Wittgenstein Archives in order to be able to spend time on independent research (cf. 3.10).

Sollohub took up a temporary administrative position at The Wittgenstein Archives in September 1993. Her responsibilities included general administration, translation work, correspondence, and co-ordination of visits by foreign visitors.

Somavilla was employed at The Wittgenstein Archives from September to December 1993, when her primary task was the transcription of texts.

All employees involved in transcription work participated in regular discussions of the coding system, thus contributing to its continual improvement.

3.3.3 Work contributed by others

As mentioned above (cf. 3.3.1), The Wittgenstein Archives has also been assisted in its activities by various individuals who have not been official members of staff at the Archives:

- Visiting researcher Josef G.F. Rothhaupt assisted with the development of The Wittgenstein Archives' registration standard and with the organisation of a seminar entitled *Wittgenstein - Architecture - Aesthetics* (cf. Appendix F).
- Visiting researcher R. Raatzsch lectured undergraduate students for two semesters on the topic of Wittgenstein's *Philosophical Investigations*.
- Employees of the Department of Philosophy, in particular Kjell S. Johannessen, Tore Nordenstam and Arild Utaker have been of great help in connection with publications and organised events.
- Employees of the Norwegian Term Bank and the Norwegian Computing Centre for the Humanities have provided both formal administrative support and informal academic assistance.
- Romauld Süßmann proof-read for The Wittgenstein Archives in 1991.

3.4   Cooperation with the Wittgenstein Trustees

Since the Wittgenstein Trustees' agreement to the establishment of The Wittgenstein Archives at the University of Bergen, there has been frequent contact between the Trustees and the Archives. All the Trustees have visited The Wittgenstein Archives in Bergen and the staff of the Archives have paid regular visits to the Trustees, also attending some of the Trustees' meetings. The Wittgenstein Archives has kept the Trustees updated as to the development of the project.

The initial agreement of 1990 was followed up as early as 1991, when The Wittgenstein Archives was granted the right by the Trustees to inspect and copy the originals of the entire Wittgenstein material covered by their copyright.

In March 1992, the Trustees agreed to extend the original contract with the University of Bergen. The contents of the 1990 contract, and the permission given in 1991 to inspect and copy the *Nachlaß*, were confirmed and consolidated; at the same time the agreement was extended to include new points. Most importantly, the University of Bergen was given "an exclusive, non-transferable permission to prepare machine-readable transcriptions and machine-readable facsimile of the Nachlaß" as well as "an exclusive, non-transferable permission to distribute and sell machine-readable transcriptions and machine-readable facsimile of the Nachlaß, together with computer systems which make their on-line reading possible". Also, it was made clear that paper printouts of the transcriptions produced at The Wittgenstein Archives would be distributed to the Trustees under the condition that any further distribution or commercial use would be discussed with the University of Bergen.

The exclusive rights to electronic publication were given on condition that, by 01.01.95, "a satisfactory financing of the project is assured; the parties reach an agreement on the sharing of royalties; and the parties reach an agreement on the choice of a publisher for the machine-readable texts". These

conditions were formally fulfilled in June 1993, when the Trustees endorsed a contract between Oxford University Press and the University of Bergen.

Finally, the 1992 agreement stipulates specifically that permission has not been given to publish the *Nachlaß* in printed form.

3.5 Cooperation with Oxford University Press

Cooperation between The Wittgenstein Archives and Oxford University Press began in 1992 with a decision to conduct a feasibility study for the production of an electronic facsimile of the complete Wittgenstein *Nachlaß*. The report on the feasibility study was completed in January 1993 and its positive outcome paved the way for further negotiations between Oxford University Press, The Wittgenstein Archives and the Wittgenstein Trustees. This in turn led to the above-mentioned contract (cf. 3.4) signed by the three parties in June 1993. This contract licenses Oxford University Press to publish, in cooperation with The Wittgenstein Archives at the University of Bergen, facsimile and transcriptions of Wittgenstein's *Nachlaß* in machine-readable form. Planning of the facsimile edition is currently underway.

3.6 Cooperation with the Source Libraries

The work of The Wittgenstein Archives is dependent upon access to best quality copies of the source material as well as inspection of the original documents themselves. The libraries in whose possession the original documents are to be found have been helpful in both these respects.

Pichler visited the Austrian National Library in Vienna in April 1991 and contact has been maintained since. The Wittgenstein Archives has also had the opportunity to buy a microfilm copy of the manuscripts in the Austrian National Library.

The Wittgenstein Archives' first contact with the Bodleian Library in Oxford was in December 1992 in connection with

the facsimile feasibility study. The Bodleian was also helpful with test photography carried out in the spring of 1993. In addition, a microfilm of the Bodleian Wittgenstein material has been purchased by The Wittgenstein Archives.

Huitfeldt, Pichler and Letnes have all visited the Trinity College Library in Cambridge on several occasions, both for proof-reading purposes and in connection with the feasibility study. The library staff have been particularly willing to support the work of The Wittgenstein Archives. Jonathan Smith, cataloguer, has visited the Archives in Bergen and has been of invaluable help in providing answers to specific *Nachlaß*-related questions. A microfilm copy of Wittgenstein material has also been purchased from the Trinity College Library.

In addition to the collection of Wittgenstein's *Nachlaß* mentioned above, The Brenner Archives at the University of Innsbruck collects Wittgenstein's private correspondence. The Wittgenstein Archives and The Brenner Archives have been in close contact with each other throughout the first project period.

3.7   Involvement with the Text Encoding Initiative

The Text Encoding Initiative (TEI) is an international research project sponsored by the Association for Computers and the Humanities (ACH), the Association for Computational Linguistics (ACL) and the Association for Literary and Linguistic Computing (ALLC). Its aim is to provide guidelines for the encoding and interchange of electronic texts. The project began in 1988 and the first draft of the TEI Guidelines (TEI P1) was published in July 1990. The authoritative version, TEI P3, is forthcoming in the spring of 1994.

The Wittgenstein Archives has been represented in the Text Encoding Initiative by Claus Huitfeldt, who has been member of the TEI Committee on Text Representation since early 1990. Huitfeldt later became chair of the TEI's Work Group on Manuscripts, where Letnes and Pichler were observers.

The Wittgenstein Archives was actively involved in organising a meeting of TEI's Technical Review Committee in Norway in November 1991 and also organised a meeting of the Work Group on Manuscripts in Bergen in September 1992 (cf. Appendix F). The editors of the TEI Guidelines and other members of TEI have paid several visits to The Wittgenstein Archives in Bergen. In March 1993, for example, Peter Robinson, head of the Work Group for Text Criticism and member of the Work Group for Manuscripts, visited The Wittgenstein Archives as part of his work on a report on the TEI guidelines carried out for the British Library. His task was to compare the Text Encoding Initiative to ongoing text encoding projects.[1]

Thus, although The Wittgenstein Archives does not itself use the TEI Guidelines (cf. 3.8.1), members of staff have been actively involved in the project and have monitored its progress. This close involvement with an international development project of the scale and quality of TEI has been invaluable to The Wittgenstein Archives.

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1. cf. Peter Robinson: *The Transcription of Primary Textual Sources using SGML* in: Office for Humanities Communication Publications Number 6, Oxford 1994.

3.8   Tools and Methods

Computers can be used purely as a means to format texts for output on paper, or they can be used as a means to manipulate texts as linguistic data - to search for, or count words or combinations of words, indexing, concordancing, stylometric analysis, etc. The Wittgenstein Archives' transcriptions of Wittgenstein's *Nachlaß* are intended to be equally useful for all purposes.

Irrespective of the aims, electronic texts are often prepared and stored in formats which are rigidly dependent upon specific hardware or software. The consequence is that they cannot easily be exchanged and that they cannot be manipulated by applications other than the one for which they were prepared. The Wittgenstein Archives has prepared its texts such that the user is given as much flexibility as possible to convert the texts to other formats.

The transcriptions at The Wittgenstein Archives are coded in a primary format using a syntax called MECS (Multi Element Code System). This syntax allows the documents to be manipulated with MECS software. The software includes user-definable conversion and filtering processes to a wide range of other formats. MECS syntax is used in conjunction with The Wittgenstein Archives' registration standard MECS-WIT, a "vocabulary" for MECS. MECS-WIT contains both codes and rules for the use of codes. It is defined such that it is possible to produce diplomatic and normalised printouts, alpha and beta lists, free-text search format, which in turn can be handled by other software.

3.8.1   MECS - Multi-Element Code System

Huitfeldt's work on the preparation of a registration standard for the Wittgenstein *Nachlaß* began during the planning stage of the Wittgenstein Archives (1989-90). The marking system used by The Norwegian Wittgenstein Project was no longer considered sufficient for the task. It was also clear that the Text Encoding Initiative (cf. 3.7) would be based on Standard Gen-

eralized Markup Language (SGML), which had become an international standard for text mark-up in 1986[1].

However, SGML seemed to impose certain restrictions on text work which were deemed undesirable for the purposes of the Wittgenstein manuscripts. For example, SGML demands a complete definition of document structure before coding can begin. The very nature of the *Nachlaß* makes it a near impossible to define such a structure prior to the transcription process. SGML's inability to handle overlapping features -frequent in handwritten manuscripts - was another reason to be wary of adopting it at the start of The Wittgenstein Archives. In addition, at that time the TEI was still far from completion and there was a severe lack of software able to deal with SGML-based documents in the way The Wittgenstein Archives would require.

It was thus necessary to develop a suitable system for use by The Wittgenstein Archives, which would remain as close to SGML as possible, without making compromises which would be detrimental to the principles and progress of the work at The Wittgenstein Archives. At the same time, the new system should be simple and flexible enough to allow for changes to be made in the course of future work without necessitating changes in software. It should also be general enough to be of potential use to other text encoding projects and should be compatible with the internationally recognised standard, SGML.

It was for these reasons that Multi-Element Code System (MECS) was designed. All SGML documents are formally MECS-conforming, but not *vice versa*. MECS contains some of the features of SGML but it also contains additional, simpler mechanisms for representing structures which are cumbersome in SGML. Unlike SGML, MECS allows overlapping ele-

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1. cf. *Information Processing-Text and Office Systems Standard Generalized Markup Language (SGML)*, ISO 8879-1986, International Organization for Standardization: Geneva 1986.

ments and does not require a Document Type Definition, although it allows (but does not require) the specification of a similar (though simpler) Code Definition Table.

The first version of MECS was finished in February 1991, a moderately revised version was finished in June 1992.

3.8.2 MECS Program Package

The MECS Program Package contains programs for the creation, validation, formatting, reformatting, analysis and conversion of MECS-conforming documents.

The program MECSVAL is an interactive, validating parser-editor, which checks documents for MECS conformity and which may also on request provide quantitative information about the code structure of a document.

The reformatter, MECSPRES, offers a number of options for the layout of elements (margins and marginalia, indentation, tables, columns, notes, headers, footers, etc., features such as bold, italic, single and double underlining, capitalisation, letter-spacing, markers and special characters, etc.) and outputs text in various formats, e.g. WordPerfect, Folio Markup, plain ASCII, etc. In conjunction with the program MECSSPEL, MECSPRES may also be used to produce filtered graphword lists from encoded documents. It is this procedure that forms the basis for The Wittgenstein Archives' system for vocabulary control.

MECSLIST analyses relationships between the codes in a document and allows the user to define breakpoints at which to display the code stack, list all recursive or overlapping codes, and create a tabulated list of all codes occurring in a document.

MECSBETA computes and displays all possible combinations of so-called poly-element codes (which at The Wittgenstein Archives are used to represent alternatives and substitutions in manuscripts). Inspecting such combinations is part of the process of checking whether a text is well-formed.

MECSSGML converts MECS-conforming documents to SGML- conforming document instances. The conversion may or may not lead to a certain loss or distortion of information, depending upon the degree to which the document in question includes features specific to MECS. The program SGMLMECS converts SGML documents to standard MECS notation without loss of information.

A prototype of MECSVAL was already available when The Wittgenstein Archives started. Most of the other programs became available during 1991. The program package has been continuously updated and optimised throughout the project period. All programs were written by Claus Huitfeldt.

3.8.3 MECS-WIT - Registration Standard

The Wittgenstein Archives' registration standard, MECS-WIT, is an implementation of MECS[1], i.e. MECS-WIT defines a specific realisation of the syntactical scheme laid out by MECS; it provides a vocabulary for the description of phenomena occurring in the Wittgenstein *Nachlaß* and indicates guidelines for the application of this vocabulary. These parts of the registration standard are called "Code Syntax", "Code Book" and "Encoding Guidelines", respectively.

For example, MECS states that a certain type of code may consist of a start tag, a text element and an end tag. The start tag may consist of a start tag open, a generic identifier and a start tag close, etc. MECS-WIT's Code Syntax specifies the values of these general syntactical elements to the effect that such codes have the following appearance: '<GI/ text /GI>', where 'GI' is a generic identifier and 'text' is the text element. The Code Book provides a list of legal generic identifiers. For example, since 'us1' is a legal generic identifier, '<us1/ ... /us1>' (where '...' stands for a string of characters) is a legal expression in a MECS-WIT document. Finally, the Encoding Guidelines states that 'us1' means 'underlined with one straight solid line' and explains under which circumstances this code should be applied in the transcription of Wittgenstein's manuscripts. It also discusses exceptions and problems, how and under what circumstances a text element marked with this code may be combined with other text elements, etc.

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1. In this respect, the relationship between MECS and MECS-WIT is similar to the relationship between SGML and e.g. the TEI Guidelines (cf. 3.8.1).

3.9 Preparation of Texts

3.9.1 Primary Sources

In 1976 the University Library in Oslo purchased a paper copy of the Cornell microfilm of Wittgenstein's *Nachlaß*. In 1990 the library agreed to deposit the Cornell copy at The Wittgenstein Archives in Bergen. The Cornell copy was thus the Archives' first primary source and provided the basis for transcription at the beginning of the project.

However, as explained above (cf. 2.1), the Cornell copy is incomplete and of poor quality. Invaluable help was provided by Georg Henrik von Wright, who made his private collection of copies of Wittgenstein's *Nachlaß* available to The Wittgenstein Archives.

In the course of the project period, the project has been able to purchase newer and better microfilms as mentioned above (cf. 3.6). The Wittgenstein Archives now has at its disposition a complete set of copies of the *Nachlaß*.

3.9.2 Cataloguing

As part of his work at The Wittgenstein Archives during the initial phase of the first project period, Alois Pichler produced a catalogue of links between von Wright's catalogue of the *Nachlaß*, the Cornell microfilm and the bound volumes of the Cornell microfilm. As part of his own Wittgenstein research he later produced a catalogue linking all published Wittgenstein texts to their respective origins in the *Nachlaß*.

Some of the results of this work were published in 1991[1]. The complete catalogue of text sources was published in 1993 in a joint publication with Michael Biggs (University of Hertfordshire). This publication also includes a bibliography of all Wittgenstein's published texts and diagrams[2].

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1. cf. Alois Pichler: *Ludwig Wittgenstein, Vermischte Bemerkungen: Liste der Manuskriptquellen* in: Working Papers from The Wittgenstein Archives at the University of Bergen. No. 1, Bergen 1991.

3.9.3 Transcriptions

The transcription of a *Nachlaß* text is performed in the following stages: First, the transcriber produces a primary transcription of the text according to the rules set out in the registration standard MECS-WIT (cf. 3.8.3). The transcription is made on the basis of photocopies of the texts kept at The Wittgenstein Archives. Once the transcription satisfies the formal requirements of MECS-WIT, it can be processed by the MECS Software Package. At this stage the transcription is regarded as 'useable'.

The next procedure is to perform a vocabulary check. This process eliminates a substantial number of simple mistakes. The next step is to produce from the primary transcription a so-called diplomatic and normalised printout.

These filtered versions of the transcription, as well as the primary transcription itself, are then passed on to the proofreader, who uses them as a support for his/her corrections, which are based on a detailed comparison of the primary transcription with the photocopy. All transcriptions are finally checked against the original material.

3,900 pages were transcribed from scratch during the first project period. In addition, the project took over 3,200 pages of transcriptions from The Norwegian Wittgenstein Project (cf. 2.3). All transcriptions are useable, i.e. they conform to the formal requirements of the registration standard, and can thus be processed by MECS software for purposes of free-text searches, production of diplomatic and normalised printouts, word lists and concordances etc.

The project also received a full transcription of VW140, donated to The Wittgenstein Archives by Masahiro Oku, University of Osaka.

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2. cf. Michael Biggs and Alois Pichler: *Wittgenstein: Two Source Catalogues and a Bibliography* in: Working Papers from The Wittgenstein Archives at the University of Bergen. No. 7, Bergen 1993.

Approximately 3,200 pages of the transcriptions have been proof-read one or more times[1].

In sum, by the end of December 1993 approximately 7,100 pages were available in machine-readable form. For full details of transcribed material, cf. Appendix I.

3.9.4   Electronic Facsimile

As already mentioned above (cf. 3.5), a feasibility study was carried out towards the end of 1992 in order to provide technical specifications for and assess the production costs of an electronic facsimile of Wittgenstein's *Nachlaß*.

The Wittgenstein Archives was responsible for organising and implementing the study. Representatives of *Oxford University Press*, the Norwegian Computing Centre for the Humanities and the *Department of Research Management* at the University of Bergen also took part in the work group.

The report from the feasibility study assumes the target audience to be university libraries, philosophy departments, other research institutions, and individual scholars. The report confirms that an electronic facsimile will be of great use to the philosophical milieu. It will be several years before the entire *Nachlaß* has been transcribed, and in the meantime the facsimile will be able to offer philosophers unique access to a complete set of Wittgenstein's philosophical writings. It was also assumed that the facsimile would retain its value in the future as a complement to the transcriptions.

The creation of an electronic facsimile has been made feasible by the development of technology in the last few years, but even today it is no trivial task to digitalise material of this kind. The sheer quantity of the *Nachlaß*, the diverse nature of its contents (approx. 5000 pages of typescript, a few manuscripts on loose sheets, the rest in bound volumes and note-

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1. The transcriptions taken over from The Norwegian Wittgenstein Project were mechanically converted to MECS-WIT. Some of them turned out to be of rather poor quality, and have not yet been proof-read.

books), and the unavoidable problems of low contrast, bleed-through and writing in or across the gutter, represent a significant technological challenge.

In terms of image capture, it is important to combine non-harmful handling of the original manuscripts with acceptable throughput and image quality. At the same time an effort must be made to keep storage space requirements within reasonable limits. The feasibility study report recommends the use of CD-ROM as the medium for distribution.

The study concludes that while it is possible to create what is defined as a Very High Quality electronic facsimile, i.e. archival quality colour reproduction, this level of quality is currently not feasible for a publication project. It was therefore recommended that the facsimile should contain all images in two versions: 1) Minimum Quality, i.e. a resolution of 72 dpi, and 16 shades of grey, stored on one CD-ROM disk; and 2) Medium Quality, i.e. average resolution of 100 dpi with a minimum of 72 dpi and a maximum of 250 dpi, and 16 million colours, stored on four CD-ROM disks. Minimum Quality was regarded in most respects as comparable to ordinary black-and-white microfilm, Medium Quality in most respects superior to ordinary microfilm.

A thirteen month project plan has been proposed according to which the first three and a half months will be spent developing a prototype. On the basis of the experience gathered during this process, the methods and technology should be evaluated and, if necessary, adjusted.

Before the facsimile project can go ahead, however, a considerable amount of preparation must be done. The libraries must be consulted, financing must be settled, and more specific technical specifications must be developed. This work will be carried out by Oxford University Press in cooperation with The Wittgenstein Archives. Work had begun by the end of the first project period.

3.10   Research, Tuition and Supervision

During her involvement at The Wittgenstein Archives in 1990 and 1991, Gorlée was able to draw on the work of the project and its source material in conjunction with a research project she was undertaking on Wittgenstein and Peirce.[1]

Huitfeldt is working on a doctoral project in philosophy under the title 'Texts and Text Encoding'. The development of the MECS code syntax and a significant amount of the work carried out in connection with the development of the registration standard for the project (cf. 3.8.1, 3.8.2 and 3.8.3) represent the core of Huitfeldt's research. Huitfeldt, who for most of the first project period held a position as Research Fellow, was the only staff member formally entitled to undertake research as part of his work time. However, the amount of work involved in management, administration, systems development and maintenance meant that there was often insufficient time left for his own research.

Also parts of Pichler's work for the Archives have become a basis for doctoral research on Wittgenstein's *Nachlaß*. Pichler was formally employed in a technical and administrative position. Since the project was not able to offer him research time as part of his work, he went over to a part-time position in order to be able to pursue his research interests (cf. 3.3.2).

The Wittgenstein Archives' contribution to research in general, however, has not only been through its own staff. Visiting researchers have made considerable use of the research facilities available at The Wittgenstein Archives and have contributed greatly to on-site research (cf. Appendix G).

None of the positions at The Wittgenstein Archives had any obligatory tuition or supervisory role during the first project period. Despite this, the staff of The Wittgenstein Archives as well as its numerous visiting researchers have contributed to

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1.   cf. Dinda L. Gorlée: *Semiotics and the Problem of Translation*, Alblasserdam 1993.

tuition at the University of Bergen by holding seminars and lectures (cf. Appendices D and H).

In addition, Huitfeldt has since 1991 acted as advisor for *Sunniva Solstrand*, graduate student at the *Department of Information Science*, University of Bergen, on a dissertation (*"hovedoppgave"*) concerning methods for automatic construction of SGML DTDs (formal document descriptions) of coded documents. Her work was based on experiments made with material from The Wittgenstein Archives.

The training of new personnel has also demanded the devotion of tutoring time on behalf of Huitfeldt, Pichler, Letnes and Cripps.

3.11 Publications

The publication of Wittgenstein's entire *Nachlaß* in electronic form is one of The Wittgenstein Archives' main aims (cf. 1, 3.1 and 3.4). This section, however, will concentrate on providing an overview of other publications by The Wittgenstein Archives and its staff members.

Publications by members of staff during the project period include two monographs (one jointly with Michael Biggs, University of Hertfordshire) published in the Working Papers and five articles published in journals and/or books abroad. These publications are listed in Appendix C.

3.12 Lectures and Seminar Talks

Members of staff at The Wittgenstein Archives have held twenty-seven lectures and seminar talks in the period 1990-93, thirteen in Norway and fourteen abroad. A full overview can be found in Appendix D.

3.13 International Visits

The work of The Wittgenstein Archives in Bergen has received a considerable amount of international attention within the areas of Wittgenstein research and text encoding. Frequent mutual visits have been exchanged with the Wittgenstein Trustees, Oxford University Press, the Brenner Archives (Innsbruck), Oxford University Computing Service/Oxford Text Archive, and the Text Encoding Initiative. The Trinity College Library (Cambridge), the Bodleian Library (Oxford) and the Austrian National Library (Vienna) represent other regular points of contact.

An overview of international visits undertaken by staff members of The Wittgenstein Archives in the first project period can be found in Appendix E. Of a total of sixteen visits, four were proof-reading visits to England or Austria, eight were specifically on the subject of text encoding and four involved meetings with either the Wittgenstein Trustees or Oxford University Press. In addition, meetings with other international contacts were often arranged in conjunction with these visits. These numbers do not include travel in connection with lectures and seminar talks (cf. 3.12).

3.14   Organised Events

During the first project period, The Wittgenstein Archives organised and/or hosted two international seminars, two national seminars and one local seminar. These events were organised in cooperation with other institutions such as Oslo School of Architecture, The Norwegian Computing Center for the Humanities, the Text Encoding Initiative, the Wittgenstein Seminars in Skjolden and Collège International de Philosophie. A full overview can be found in Appendix F.

3.15   Visiting researchers, guest lecturers, other visitors

Since August 1990 The Wittgenstein Archives has been host to fourteen visiting researchers from universities in Austria, England, Estonia, Germany, Japan, Switzerland and USA. Most of the visitors have been postdoctoral researchers, others have used The Wittgenstein Archives to prepare doctoral theses. With visits ranging from a few days to more than a year, these visiting researchers have spent a total of approximately 150 person-weeks at the Archives. See Appendix G for a full overview of visiting researchers. Visiting researchers have contributed to the academic work of The Wittgenstein Archives as well as to that of other parties at the University of Bergen. The contributions of Josef G.F. Rothhaupt and Richard Raatzsch have already been mentioned (cf. 3.3.3), while other visitors have given nineteen guest lectures at The Wittgenstein Archives. See Appendix H for a full overview.

In general, visiting researchers have been an asset to The Wittgenstein Archives, not only through lectures and tuition, but also through informal exchange of academic ideas.

The Wittgenstein Archives has also received numerous shorter visits by scholars from abroad and from other universities in Norway, all of whom have been given a presentation of the activities of the Archives.

3.16 Administration and Infrastructure

3.16.1 Premises

During the first two years of its existence The Wittgenstein Archives shared premises with the Norwegian Term Bank in Strømgaten 53. In April 1993 the Archives moved to new premises at the Norwegian Computing Centre for the Humanities in Harald Hårfagresgate 31.

Insufficient space for its staff members and visitors was a recurrent problem for The Wittgenstein Archives during the first three years of its existence, but by the end of 1993, according to plan, it had at its disposal the entire fifth floor of Harald Hårfagresgate 31. In addition, the Archives has access to the meeting room, library, lunch room and other common areas in the building.

3.16.2 General administration

During the first two years of the project period The Wittgenstein Archives received administrative assistance from and shared technical resources with the Norwegian Term Bank. When the Archives moved to its new premises in April 1992 a similar but more extensive cooperation was initiated with the Norwegian Computing Service for the Humanities. An agreement between the two parties set the terms for cooperation, not only on the sharing of premises and equipment, but also involving a regular and more extensive purchase of administrative and computer services, such as accounts, invoicing, photocopying, post, technical advice etc.

Even so, a large amount of administrative work, such as foreign correspondence, international cooperation, annual reports, budgets, publications etc., has to be taken care of by the staff of The Wittgenstein Archives.

3.16.3 Equipment

As of 31.12.93, The Wittgenstein Archives had at its disposal the following equipment:

1 Olivetti M380	386	computer with	80 MB hard disk
1 Copam PC286c	286	computer with	40 MB hard disk
3 Acer 1125E	386	computer with	50 MB hard disk
3 Compaq Deskpro	486	computer with	250 MB hard disk
1 Toshiba T3100SX	386SX	computer with	40 MB hard disk
1 Canon LBP8iii		laser printer	
2 OKI 182 Elite		matrix printers	

The cooperation between The Wittgenstein Archives and the Norwegian Computing Centre for the Humanities includes the integration of The Wittgenstein Archives into the local area network, with connections to Internet. The Wittgenstein Archives is also free to use the Computing Centre's printers, photocopier, fax machine and other facilities.

3.16.4 Literature

During the course of the first project period The Wittgenstein Archives has acquired most of the available book editions of Wittgenstein's works in German and English, as well as occasional translations to other languages.

The Wittgenstein Archives also has a selection of secondary Wittgenstein literature. Secondary literature has been acquired as and when the need has arisen in the course of the work of the project. It has not been considered a primary aim, however, to build up a complete and up-to-date library of secondary Wittgenstein literature. Staff and visitors at the Wittgenstein Archives have full access to the resources of the University of Bergen Library.

The Wittgenstein Archives has also purchased the database "PastMasters", published by Intelex Corporation. "PastMasters" contains an almost complete electronic edition of Wittgenstein's *published* works, in their original language, as well as works by Machiavelli, Rousseau, Ricardo, Burke, Paine, Smith, Locke, Berkeley, Hume, Hobbes, J.S. Mill, Bentham and Sidgwick, and the collected works of Kierkegaard. The texts are prepared for use with the free-text search system Folio-Views.

The Wittgenstein Archives possesses a copy of G.H. von Wright's and H. Nyman's unpublished transcription of *Philosophische Untersuchungen* (*Frühversion - Mittelversion - Letztversion*), as well as the transcriptions of the *Geheimstellen* in the *Nachlaß*.

3.17   Accounts

The first project period (three and a half years) had a total budget of approximately NOK 4 million, excluding overheads, of which approximately NOK 2.5 million was financed directly by the university. The remaining funding came primarily from the Norwegian Research Council, the Meltzer Foundation and the Nansen Foundation.

3.18   Evaluation

When the Academic Senate decided to establish The Wittgenstein Archives at the University of Bergen in the Summer of 1990, it was decided that the project would initially run for three and a half years, and that a decision to prolong the project to fulfil the task of preparing the entire *Nachlaß* of Ludwig Wittgenstein would be taken on the basis of a critical evaluation of the project's achievements.

An evaluation committee was appointed by the Faculty Council 20.10.92. The committee comprised Rudolf Haller (Karl-Franzens-Universität Graz), Allen Renear (Brown University), Kurt Erich Schöndorf (University of Oslo) and Paul Stray (Uni-

versity of Tromsø). The committee members visited The Wittgenstein Archives for several days in January 1993 and delivered their report 22.03.93.

The evaluation report was positive and praised both the academic quality and the progress of the project. In a letter dated 05.04.93, the project Board recommended a four-year extension of the project. The Faculty Council also recommended an extension of The Wittgenstein Archives (in its meeting of 27.04.93), decided to allocate a research fellowship to the project, and promised to consider further part-financing of the project. On 29.04.93 the Academic Senate added its approval to the continuation of The Wittgenstein Archives. It emphasised the importance of the work of The Wittgenstein Archives for the University as a whole and agreed to the continuation of negotiations with Oxford University Press to reach an settlement regarding the publication of an electronic facsimile and machine-readable transcriptions.

An edited and approved version of the evaluation report can be found in Part II of this publication (cf. p.62).

3.19   Summary of Achievements

The Wittgenstein Archives pursued its aims and objectives ambitiously during the first project period. By the end of December 1993, 7,100 pages of the *Nachlaß* had been transcribed, the Archives had developed its own registration standard and software, and numerous visiting researchers had made use of the research facilities available at the Archives.

In the original project plan (cf. 3.1), it was stated that: "By the end of the project period, the following texts are to be available in transcribed and finished form: Catalogue nos. 105-122, 129-130, 147, 162b, 171, 173, 175-177, 213 and 228-230." During the course of the first project period it was decided to give higher priority to the transcription of manuscripts from the last two year's of Wittgenstein's life (1949-1950) than to the completion of unfinished transcriptions from The Norwegian Wittgenstein Project. Thus, the final list of texts transcribed

during the first project period was as follows: catalogue nos. 105, 106, 108, 109, 114, 115, 118, 122, 168, 169, 170, 171, 172, 173, 177 and 178.

The original project plan anticipated a total of nine work-years for the first project period, whereas the project in fact had ten and a half work-years at its disposal. It became clear very soon after the beginning of the project that many of the Archives' administrative tasks were both less 'routine' and more time-consuming than expected. While routine tasks were covered by the relevant agreements with the Norwegian Term Bank and the Norwegian Computing Center for the Humanities, a substantial amount of administrative work had to be dealt with by members of staff of the Archives.

In the area of systems development, progress was according to plan. A registration standard was defined and software was developed for the presentation and computer-assisted text analysis of Wittgenstein's *Nachlaß*. The availability of machine-readable transcriptions of the *Nachlaß* at The Wittgenstein Archives in Bergen attracted considerable interest among Wittgenstein scholars.

The Wittgenstein Archives received its first visiting researcher in August 1990, a year ahead of schedule. Since then, the Archives has been host to visitors from all over the world, for stays ranging from a few days to more than a year (cf. 3.15 and Appendix G).

Work within the area of text encoding has progressed throughout the first project period. The Wittgenstein Archives has been involved in Text Encoding Initiative, where Claus Huitfeldt has been group leader for the Manuscripts Group and has contributed to the work on the TEI Guidelines, due to be published in the course of 1994.

Contact with visiting researchers has contributed greatly to the Archives' involvement and cooperation with third parties within the field of Wittgenstein research.

In addition to the objectives set out in the original project plan, The Wittgenstein Archives has also extended its aims in several areas. An early decision was made to publish a series of working papers from The Wittgenstein Archives (cf. Appendix B). In March 1992 another publishing decision was taken, whereby the Wittgenstein Trustees granted The Wittgenstein Archives the exclusive rights to electronic publication of the *Nachlaß* (cf. 3.4). Both these decisions extended the sphere of activity of The Wittgenstein Archives during the first project period.

The signing of a contract with Oxford University Press in May 1993 secured Oxford University Press' position as publisher for an electronic edition of the *Nachlaß*, initially in the form of an electronic facsimile, but with the intention to supplement it with machine-readable transcriptions from The Wittgenstein Archives at a later date.

The production of an electronic publication of the *Nachlaß* can be added to the list of objectives which will play a central role in the second project period of The Wittgenstein Archives.

4.   Second project period

The following outline for the second project period is based on the recommendations of the Evaluation Committee (cf. Part II of this publication), which were approved by the Faculty of Arts and the Academic Senate.

4.1   Organisation and Personnel

A new Board for the second project period will consist of the following:

1 representative from the central administration

1 representative from the Faculty of Arts

2 representatives from the Department of Philosophy

1 representative from The Wittgenstein Archives

An increase in staff for the second project period will result in the following positions:

2 Senior lecturers, one of which as project leader

2 Researchers

1 Full-time staff member

1 Part-time staff member

1 Research Fellow

1 part-time programmer (proposed)

There will thus be considerably more staff during the second project period in comparison with the first. Emphasis has been laid on at least two positions incorporating a fair proportion of individual research. This will both reinforce the research aspects of the project and attract suitably highly qualified applicants to the positions.

In the original project plan it was estimated that the project could be completed within a two and a half year extension

period with three extra full-time positions. This estimation can now be considered unrealistic. It will probably take some time before all new positions are filled and the second project period is likely to last a minimum of 4 years, with 6-7 members of staff.

Otherwise, there will be no changes in the organisational form of The Wittgenstein Archives.

4.2   Budget and Financing

The Faculty of Arts has budget responsibility for The Wittgenstein Archives. In addition, the project will receive a basic grant from the University of Bergen.

Applications for external funding are also planned to the Norwegian Research Council (NFR), the Meltzer Foundation and the Nansen Foundation. It is also hoped to be able to apply for funding from international sources.

4.3   Transcription Work

Two research positions and one part-time member of staff will be devoted 100% to transcription-related work during the second project period, while other positions may also include some transcription work. This should provide the necessary increase in manpower to ensure good progress in terms of transcription.

4.4   Electronic Publication

During the first part of the second project period, production of the electronic facsimile of the *Nachlaß*, in cooperation with Oxford University Press, will be concluded.

4.5   International Cooperation

It is hoped to be able to establish formalised cooperation agreements with partners abroad early on in the second project period. Exchange of information and scholarly advice, as well as assistance in funding applications are the major objectives of such cooperation.

Appendix A   **Personnel**

Astrid Castell   75%   16.09.91 - 30.06.92

Peter Cripps   100% 28.06.93 - 28.12.93

Dinda L. Gorlée   50%   01.08.90 - 18.03.91

Claus Huitfeldt   100% 01.06.90 - 31.12.93   (Project Director)

Ole Letnes   100% 05.08.91 - 30.06.93

Frank Meyer   100% 28.09.93 - 31.12.93

Alois Pichler   100% 18.09.90 - 31.12.92

                              50%   01.01.93 - 31.12.93

Maria Sollohub   100% 27.09.93 - 31.12.93

Ilse Somavilla   100% 28.09.93 - 23.12.93

Diverse extra tasks have been undertaken for The Wittgenstein Archives on an hourly basis by temporary employees.

Of a total of 126 work-months in the first project period, 61 months were spent on text-related activities, while the remaining 65 months were devoted to other project-related activities, ranging from routine administration and system development to participation at international conferences.

Appendix B   Working Papers

* Alois Pichler: *Ludwig Wittgenstein, Vermischte Bemerkungen: Liste der Manuskriptquellen - Ludwig Wittgenstein, Culture and Value: A List of Source Manuscripts*.
  No. 1, 1991. German-English parallel text. 52 pages.
* *The Wittgenstein Archives at the University of Bergen - Background, Project Plan and Annual Report 1990*.
  No. 2, 1991. Norwegian-English parallel text. 60 pages.
* *The Wittgenstein Archives at the University of Bergen - Annual Report 1991*.
  No. 4, 1992. Norwegian-English parallel text. 47 pages.
* Paul Henry and Arild Utaker (eds.): *Wittgenstein and Contemporary Theories of Language*, Papers read at the French-Norwegian Wittgenstein seminar in Skjolden, 23-26 May 1992.
  No. 5, 1992. English. 251 pages.
* Peter Philipp and Richard Raatzsch: *Essays on Wittgenstein*.
  No. 6, 1993. English. 178 pages.
* Michael Biggs and Alois Pichler: *Wittgenstein: Two Source Catalogues and a Bibliography*, Catalogues of the Published Texts and of the Published Diagrams, each Related to its Sources.
  No. 7, 1993. English. 175 pages.

Forthcoming:

* Claus Huitfeldt: *MECS - A Multi-Element Code System*.
  No. 3. English. Approx. 150 pages.

*   Claus Huitfeldt: *MECS-WIT - A Registration Standard for The Wittgenstein Archives at the University of Bergen.* (Working title)
English. Approx. 150 pages.

Appendix C   Publications by members of staff

* Claus Huitfeldt: *"Das Wittgenstein-Archiv der Universität Bergen. Hintergrund und erster Arbeitsbericht* mit Nachtrag: *Wittgenstein-Nachlaß: Nothing is hidden"* in *Mitteilungen aus dem Brenner-Archiv* no. 10, Innsbruck 1991, pp 93-106.
  [Revised and updated version under the title *"Computerizing Wittgenstein - The Wittgenstein Archives at the University of Bergen"* in: Kjell S. Johannessen, Rolf Larsen and Knut Olav Åmås (eds.): *Wittgenstein and Norway*, Solum: Oslo 1994.]

* Alois Pichler: *Ludwig Wittgenstein, Vermischte Bemerkungen: Liste der Manuskriptquellen. Ludwig Wittgenstein, Culture and Value: A List of Source Manuscripts*, Working papers from The Wittgenstein Archives at the University of Bergen no. 1, Bergen 1991.

* Claus Huitfeldt: *"Multi-Dimensional Texts in a One-Dimensional Medium"*, in: Paul Henry and Arild Utaker (eds.): *Wittgenstein and Contemporary Theories of Language*, Papers read at the French-Norwegian Wittgenstein seminar in Skjolden, May 1992. Working Papers from The Wittgenstein Archives at the University of Bergen, no. 5, Bergen 1992, pp 142-161. Also forthcoming in: *Computers and the Humanities*, 1994.

* Alois Pichler: *"Wittgenstein's Later Manuscripts: Some Remarks on Style and Writing"* in: Paul Henry and Arild Utaker (eds.): *Wittgenstein and Contemporary Theories of Language*, Papers read at the French-Norwegian Wittgenstein seminar in Skjolden, May 1992. Working Papers from The Wittgenstein Archives at

the University of Bergen, no. 5, Bergen 1992, pp 219-251.

[Translation and slight revision published under the title *"Wittgensteins spätere Manuskripte: einige Bemerkungen zu Stil und Schreiben"* in: *Mitteilungen aus dem Brenner Archiv* no. 12, Innsbruck 1993 pp 8-26.]

*   Michael Biggs and Alois Pichler: *Wittgenstein: Two Source Catalogues and a Bibliography. Catalogues of the Published Texts and of the Published Diagrams, each Related to its Sources*, in: Working Papers from The Wittgenstein Archives at the University of Bergen no. 7. Bergen 1993.

*   Alois Pichler: *"Wittgensteins Nachlaß"* in: *Information Philosophie* 4. Lörrach 1993. pp 54-60.

*   Claus Huitfeldt: *"Towards a Machine-Readable Version of Wittgenstein's Nachlaß: Some Editorial Problems"*, in: Hans Gerhard Senger (ed): *Philosophische Editionen. Erwartungen an sie - Wirkungen durch sie, Beihefte zu editio Band 6*, Max Niemeyer Verlag: Tübingen 1994, pp 37-43.

Appendix D   Lectures and Seminar Talks

* Claus Huitfeldt: *American Philosophical Associations Annual Meeting 1990* in Boston, Massachusetts, 27.-30.12.90; *"The Wittgenstein Archives at the University of Bergen. An early work Report."* Published in 1991 as *"Das Wittgenstein-Archiv der Universität Bergen ......"* and in 1994 as *"Computerizing Wittgenstein - The Wittgenstein Archives at the University of Bergen"* (see Appendix C)

* Claus Huitfeldt: *Brown Computing in the Humanities' Users' Group* seminar at Brown University, Providence, Rhode Island, 04.01.91; *"The Wittgenstein Archives at the University of Bergen"*

* Alois Pichler: Lecture at the seminar *Wittgenstein - Arkitektur - Estetikk* (Wittgenstein - Architecture - Aesthetics) organised by The Wittgenstein Archives, Bergen, 28.01.91; *"To Pursue an Idea"*

* Claus Huitfeldt: talk given at the doctoral seminar *Wittgenstein and the Philosophy of Culture* in Dubrovnik, 06.05.91; *"Towards a machine-readable version of Wittgenstein's Nachlaß"*

* Alois Pichler: presentation at the doctoral seminar *Wittgenstein and the Philosophy of Culture* in Dubrovnik, 08.05.91; *"Ludwig Wittgenstein, Culture and Value: A List of Source Manuscripts"*, published in the series of *Working Papers from The Wittgenstein Archives* (see Appendix B)

* Claus Huitfeldt: lecture at the *Wittgenstein Seminar in Skjolden*, 25.05.91; *"Ludwig Wittgenstein - hans liv og verk"* (Wittgenstein - Life and Work).

* Claus Huitfeldt: *Tekstkoding* (Text Encoding) seminar, Bergen, 20.06.91; *"Presentasjon av Text Encoding Initiative (TEI)"* (Presentation of the Text Encoding Initiative)

* Claus Huitfeldt: lecture given at *Tekstkoding* (Text Encoding) seminar, Bergen, 20.06.91; *"Multi-Element Code System (MECS), kodesystem og programvare under utvikling ved Wittgensteinarkivet ved Universitetet i Bergen"* (Multi-Element Code System (MECS), Code System and Software under Development at The Wittgenstein Archives at the University of Bergen)
* Claus Huitfeldt: presentation and demonstration of software at *Text Encoding Initiative's First European Workshop*, Oxford, 02.07.91
* Claus Huitfeldt: one of series of lectures organised in conjunction with Georg Henrik von Wright, G.E.M. Anscombe, Ivar Oxaal og Eike von Savigny, given at official opening of The Wittgenstein Archives at the University of Bergen, 01.09.91; *"The Wittgenstein Archives at the University of Bergen"*
* Claus Huitfeldt: working paper at TEI meeting in Vatnehalsen, 15.-18.11.91; *"Diplomatic transcription of modern manuscripts, preliminary suggestions and recommendations"*
* Claus Huitfeldt: talk at *Scandinavian Conference on Computation Linguistics*, Bergen, 28.11.91. *"Merking, presentasjon og analyse av komplekse tekstlige primærkilder"* (Tagging, Presentation and Analysis of Complex Primary Text Material)
* Claus Huitfeldt: lecture at *VI. Internationale Fachtagung der Arbeitsgemeinschaft Philosophischer Editionen der Allgemeinen Gesellschaft für Philosophie in Deutschland*, Berlin 11.-13.06.92; *"Towards a Machine-Readable Version of Wittgenstein's Nachlaß: Some Editorial Problems"* in: Hans Gerhard Senger (ed): *Philosophische Editionen. Erwartungen an sie - Wirkungen durch sie, Beihefte zu editio Band 6*, Max Niemeyer Verlag: Tübingen 1994 (see Appendix C)

* Claus Huitfeldt: lecture at the French-Norwegian *Wittgenstein Seminar in Skjolden*, 23.-26.05.92; ″*Multi-dimensional Texts in a One-dimensional Medium*″. Published in the series of *Working Papers from The Wittgenstein Archives at the University of Bergen*, no. 5 (see Appendix B)
* Alois Pichler: lecture at the French-Norwegian *Wittgenstein Seminar in Skjolden*, 23.-26.05.92; ″*Wittgenstein's Later Manuscripts: Some Remarks on Style and Writing*″. Published in the series of *Working Papers from The Wittgenstein Archives at the University of Bergen*, no. 5 (see Appendix B)
* Ole Letnes: seminar at the Norwegian Computing Centre for the Humanities (NCHH), University of Bergen, 11.12.92; ″*Wittgensteinarkivets kodesystem og transkripsjonsprinsipper*″ (The Wittgenstein Archives' code system and transcription principles)
* Alois Pichler: seminar at the Department of German, University of Bergen, 09.03.93; ″*Wittgenstein und Schreiben*″ (Wittgenstein and Writing)
* Alois Pichler: seminar at NCHH, University of Bergen, 19.02.93; ″*What is transcription, really?*″
* Ole Letnes, Alois Pichler, Arild Utaker (Department of Philosophy): lecture for *Studentersamfunnet*, University of Bergen, 16.03.93; ″*Wittgenstein*″
* Claus Huitfeldt, with *Øystein Reigem* (NCHH): seminar at NCHH, Bergen, 16.04.93; ″*Wittgenstein i faksimile*″ (Wittgenstein as a facsimile)
* Claus Huitfeldt: seminar at the Centre for the Study of the Sciences and the Humanities, University of Bergen, 12.05.93; ″*Tekstkoding, tekstkritikk og tekstlingvistikk*″ (Text Encoding, Text Criticism and Text Linguistics)
* Claus Huitfeldt: lecture at Skjolden seminar, 22.-23.05.93: "Wittgensteinarkivet ved Universitetet i Ber-

gen" (The Wittgenstein Archives at the University of Bergen)

* Claus Huitfeldt and Ole Letnes: paper read at the joint ACH-ALLC Conference, Washington D.C., 16.-19.06.93; *"Encoding Wittgenstein"*. Printed in: *Conference Abstracts, The Center for Text & Technology of the Academic Computer Center*, Georgetown University: June 1993, pp 83-85.

* Claus Huitfeldt: paper read at the joint ACH-ALLC Conference in Washington D.C., 16.-19.06.93; *"Manuscript Encoding: Alphatexts and Betatexts"*. Printed in: *Conference Abstracts, The Center for Text & Technology of the Academic Computer Center*, Georgetown University: June 1993, pp 85-88.

* Alois Pichler: paper read at the joint ACH-ALLC Conference in Washington D.C., 16.-19.06.93; *"What Is Transcription, Really?"*. Printed in: *Conference Abstracts, The Center for Text & Technology of the Academic Computer Center*, Georgetown University: June 1993, pp 88-91.

* Claus Huitfeldt: paper read at the joint ACH-ALLC Conference in Washington D.C., 16.-19.06.93; *"MECS - A Multi-Element Code System"*. Printed in: *Conference Abstracts, The Center for Text & Technology of the Academic Computer Center*, Georgetown University: June 1993, pp 91-94.

* Ole Letnes and Alois Pichler: lecture at *Computer in the Humanities User's Group (CHUG)* seminar, Brown University, Providence, RI, 23.06.93; *"Encoding Wittgenstein: The Wittgenstein Archives at the University of Bergen"*

* Peter Cripps: introductory talk to Derek Jarman's film *"Wittgenstein"*, shown at *Filmklubben*, University of Bergen, 07.11.93

Appendix E   International Visits

Listed below are all international visits not already included in Appendix D (Lectures and Seminar Talks):

* Alois Pichler: visit to Georg Henrik von Wright, Helsinki, 06.-11.11.90. Purpose of visit: to supplement material at The Wittgenstein Archives with copies from von Wright and to compare the quality of the Cornell copies kept at The Wittgenstein Archives with von Wright's copies.

* Alois Pichler: visit to The Brenner Archives, University of Innsbruck, December 1990. Purpose of visit: to open the way for closer cooperation and contact between The Brenner Archives at the University of Innsbruck and The Wittgenstein Archives at the University of Bergen.

* Claus Huitfeldt: visit to Brown University, Providence (RI), 04.01.91. Purpose of visit: meetings with Allen Renear (Computing and Information Services); Elaine Brennan (Women Writers Project); Paul Kahn (RIS)

* Claus Huitfeldt: visit to Harvard University, Cambridge (MA) 05.01.91. Purpose of visit: meeting with Elli Mylonas (Perseus Project)

* Alois Pichler: visit to the Austrian National Library, 01.-07.04.91. Purpose of visit: inspection of original manuscripts, proof-reading against original manuscripts; additional meetings with Vice President Moritz Czaky, Fonds zur Förderung der Wissenschaffentlichen Forschung; E. Leinfellner and W. Leinfellner (members of the Board of Österreichische Ludwig Wittgenstein Gesellschaft); Jeff Bernhard and Gloria Withalm (Österreichische Gesellschaft für Semiotik)

* Claus Huitfeldt: visit to Oxford, London and Cambridge, 16.-23.05.91. Purpose of visit: meetings with Wittgenstein Trustees; Michael Nedo (Cambridge); Susan Hockey (Oxford University Computing Service)
 * Claus Huitfeldt: visit to Oxford, 01.-03.07.91. Purpose of visit: First European Workshop of the Text Encoding Initiative (Oxford). [Financed by TEI]
* Claus Huitfeldt: visit to Nouveau-la-Neuve, Belgium, 25.-27.10.91. Purpose of visit: preparatory meeting in the Manuscript Group of the Text Encoding Initiative. [Financed by TEI]
* Ole Letnes: visit to the Trinity College Library, Cambridge, 09.-16.02.92. Purpose of visit: inspection of original manuscripts 168-178
* Alois Pichler: visit to the Trinity College Library, Cambridge, 26.09.-04.10.92. Purpose of visit: proofreading; meetings with Anscombe and Michael Biggs
* Claus Huitfeldt: visit to Oxford, 05.-10.04.92. Purpose of visit: participation at ACH-ALLC 1992 (annual conference of the Association for Computers and the Humanities (ACH) and Association for Literary and Linguistic Computing (ALLC)); additional meeting with Oxford University Press (09.04.92)
* Claus Huitfeldt: visit to Oxford and Cambridge together with Øystein Reigem (Norwegian Computing Centre for the Humanities), 9.-16.12.92. Purpose of visit: meeting in Oxford with representatives from Oxford University Press, Mary Clapinson from the Bodleian Library and Anthony Kenny to discuss electronic Wittgenstein facsimile; meetings in Cambridge with David McKitterick at the Trinity College Library and G.E.M. Anscombe

* Claus Huitfeldt: visit to Oxford and Cambridge, 17.-21.02.93. Purpose of visit: meeting with Oxford University Press; meeting with the Wittgenstein Trustees in Cambridge (21.02.92)
* Ole Letnes: visit to the Trinity College Library, Cambridge, 16.-27.02.93. Purpose of visit: proof-reading
* Claus Huitfeldt: visit to Eynsham, near Oxford, 13.-16.05.93. Purpose of visit: Text Encoding Initiative's Technical Review Meeting. [Financed by TEI]
* Claus Huitfeldt: visit to Oxford, 11.-14.09.93. Purpose of visit: meeting with Oxford University Press

Appendix F   Organised Events

28.01.91 One-day seminar, *Wittgenstein-Arkitektur-Estetikk* (Wittgenstein-Architecture-Aesthetics) at The Wittgenstein Archives, organised by visiting researcher Joseph Rothhaupt for teachers and students of the Oslo School of Architecture; c. 20 external participants.

20.-21.06.91 Two-day national seminar on *Text Encoding* in Bergen, organised by The Wittgenstein Archives in cooperation with the Norwegian Computing Centre for the Humanities; c. 30 participants

18.-20.09.92 *Text Encoding Initiative's Manuscript Group* meeting in Bergen, organised by The Wittgenstein Archives; c. 10 participants.

23.-26.05.92 Wittgenstein Seminar in Skjolden, *Wittgenstein and Contemporary Theories of Language*, a French-Norwegian seminar organised by The Wittgenstein Archives in cooperation with *Collège Internationale de Philosophie* (CIP); c. 20 participants.

22.-23.05.93 Wittgenstein Seminar in Skjolden, organised by *Wittgensteinseminara* in Skjolden in cooperation with The Wittgenstein Archives; c. 15 participants.

Appendix G   Visiting Researchers

* Josef G.F. Rothhaupt, doctoral student in philosophy at Hochschule für Philosophie in Munich, scholarship from Konrad Adenauer-Stiftung. Visitor at The Wittgenstein Archives from 20.08.90 to 31.08.91.
* Richard Raatzsch, research scholarship from Humboldt-Stiftung. Visitor at The Wittgenstein Archives from 20.10.91 to 18.12.92.
* Vladimir Richter, Universität Innsbruck. Visitor at The Wittgenstein Archives 11.-24.07.91
* Ivar Oxaal, University of Hull. Visitor at The Wittgenstein Archives 03.-06.09.91
* Eike von Savigny, Universität Bielefeld. Visitor at The Wittgenstein Archives 03.-09.09.91
* Peter Philipp, Halle. Visitor at The Wittgenstein Archives 26.04.-05.05.92
* Michael Biggs, doctoral student in philosophy, University of Reading. Visitor at The Wittgenstein Archives 18.-27.05.92, 26.-30.11.92, and 02.-05.12.93
* Allen Renear, Brown University, Providence USA. Visitor at The Wittgenstein Archives 21.-25.11.92
* Richard Weihe, Universität Zürich. Visitor at The Wittgenstein Archives 12.-17.12.92
* Peter Robinson, Oxford Text Archive. Visitor at The Wittgenstein Archives 25.-29.03.93
* David Stern, Visitor at The Wittgenstein Archives 01.-30.06.93
* Theodore R. Schatzki, University of Kentucky. Visitor at The Wittgenstein Archives 01.08 - 10.11.93
* Masahiro Oku, University of Osaka. Visitor at The Wittgenstein Archives 09.-30.11.93

*   Urmas Sutrop, Estonian Society for Analytic Philoso-
     phy. Visitor at The Wittgenstein Archives 04.-
     20.10.93

Appendix H   Guest Lectures

12.04.91 Georg Henrik von Wright, Finlands Akademi: *"Vetenskapen, förnuftet, och hoten mot människans eksistens"* (Science, rationality and threats to human existence).

03.09.91 G.E.M. Anscombe, Cambridge: *"What can we learn from Wittgenstein now?"*

03.09.91 Georg Henrik von Wright, Finlands Akademi: *"On Colour: A Logico-Philosophical Fantasy"*

04.09.91 Eike von Savigny, Universität Bielefeld: *"Common Behaviour of Many a Kind: Investigations §206"*

04.09.91 Ivar Oxaal, Hull University: *"Wittgenstein and Norway - The Pinsent Diaries: Are the Silences Significant? - A Report on Work in Progress"*

23.09.91 Avrum Stroll, University of California, San Diego: *"Common Sense and Philosophical Common Sense"*

21.11.91 Paul Henry, CNRS, Collège International de Philosophie, Paris: *"On Wittgenstein's Philosophy of Mathematics"*

22.11.91 Allen Renear, Brown University: *"The Electronic Pierce Consortium: Developing a Textbase and a Methodology for Networked Scholarship"*

03.12.91 Rudolf Haller, Universität Graz: *"Wittgenstein in Between"*. This lecture was part of a series of four lectures, arranged in cooperation with the Centre for the Study of the Sciences and the Humanities, University of Bergen.

27.04.92 Peter Philipp, Halle; *"Normative Logics without Norms"*

28.04.92 Peter Philipp, Halle; *"The Philosophical Background of some Tendencies in Epistemic Logic"*

30.04.92 Peter Philipp, Halle; *"PI 293: Public versus Private Beetles"*

17.09.92 Walter Methlagl, Brenner-Archiv, Universität Innsbruck; *"How to make an Edition of Ludwig Wittgenstein's Letters"*

17.09.92 Allan Janik, Brenner-Archiv, Universität Innsbruck; *"Ludwig Wittgenstein: the Relationship between Biography and Philosophy"*

30.11.92 Michael Biggs, University of Reading; *"Why Study Wittgenstein's Diagrams?"*

12.05.93 Jakob Meløe, Universitetet i Tromsø; *"Ord og objekter"* (Words and Objects). A seminar organised by The Wittgenstein Archives and the Department of Philosophy at the University of Bergen.

07.06.93 David Stern, University of Iowa; *"A New Exposition of the 'Private Language Argument': Wittgenstein's "Notes for the 'Philosophical Lecture'""*

12.11.93 Peter Winch, Champaign, Illinois; *"Asking too many Questions"*

12.11.93 Masahiro Oku, Osaka University; *"To what extent is the human language human?" - A Wittgenstein explication*

Appendix I   Transcriptions

The table below provides an overview of the text work under-taken completed by The Wittgenstein Archives during the first project period. These include the following categories:

- texts taken over from outside instances
- texts converted from NWP (Norwegian Wittgenstein Project) format
- texts transcribed by The Wittgenstein Archives
- texts proof-read by The Wittgenstein Archives

VW catno. [total pages]	Taken over from	Converted	Tran-scribed	Proof-read
105 [135]	-	-	AP: 135	AP,OL,RS:135
106 [300]	-	-	AP: 300	OL,RS: 300
107 [300]			AP: 300	OL: 43
108 [300]	NWP: 300	AP: 300	-	OL: 300
109 [300]	-	-	AP: 300	OL: 300
113 [286]	-	-	AP: 218	-
114 [300]	-	-	AP: 300	OL: 300
115 [300]	-	-	AP: 300	PC: 300
116 [347]	-	-	OL: 347	-
117 [275]	-	-	OL: 275	-
118 [238]	-	-	OL: 238	-
119 [295]	-	-	FM,OL,PC:295	-
120 [293]	NWP: 180	-	-	-
121 [186]	-	-	IS,PC: 186	-
122 [238]	-	-	PC: 238	AP:238

129 [221]	NWP: 213	-	-	-
130 [294]	NWP: 294	-	-	-
140 [42]	MO: 42	PC: 42	-	-
147 [96]	NWP: 96	-	-	-
162b [140]	NWP: 138	-	-	-
168 [12]	-	-	OL: 12	AP: 12
169 [161]	-	-	OL: 161	AP: 161
170 [10]	-	-	OL: 10	AP: 10
171 [14]	NWP: 14	OL: 14	-	AP: 14
172 [24]	-	-	OL: 24	AP: 24
173 [200]	NWP: 193	OL: 193	OL: 7	AP: 200
174 [78]	-	-	OL: 78	AP: 78
175 [160]	NWP: 156	OL: 156	OL: 4	AP: 160
176 [160]	NWP: 160	OL: 160	-	AP: 160
177 [21]	NWP: 21	OL: 21	-	AP: 21
178a-h [40]	-	-	OL: 40	AP: 40
208 [120]	-	-	AP: 120	-
211 [771]	NWP: 30	-	-	-
213 [776]	NWP: 956	-	-	-
214a-c [15]	-	-	AC:15	-
228 [185]	NWP: 163	-	-	-
229 [272]	NWP: 150	-	-	-
230 [155]	NWP: 107	-	-	-

SUM of machine-readable transcriptions available for use: = **7116** (cf. 3.9.3)

AC = Astrid Castell AP = Alois Pichler   FM = Frank Meyer

IS = Ilse Somavilla MO = Masahiro Oku OL = Ole Letnes

PC = Peter Cripps   RS = Romauld Süßmann

NWP = The Norwegian Wittgenstein Project (cf. 2.2)

WAB = The Wittgenstein Archives at the University of Bergen

Part II:
The Wittgenstein Archives at the University of Bergen: A Critical Evaluation

Editorial Comment

The report submitted by the Evaluation Committee after their evaluation of The Wittgenstein Archives in 1993 has been edited for this publication. The edited version is presented below and has been approved by the members of the Evaluation Committee, Professor Rudolf Haller (Graz), Professor Kurt Erich Schöndorf (Oslo), Dr. Allan Renear (Providence, Rhode Island) and Academic Registrar Paul Stray (Tromsø).

Evaluation Report

The Evaluation Committee found The Wittgenstein Archives to be a project of extraordinary achievements and considerable international prestige. The Wittgenstein Archives is a substantial asset to the University of Bergen, and the Committee strongly recommends its continued support.

There are, however, several organisational and administrative problems that should be pointed out. In general, these revolve around a common theme: the scholarly nature of The Wittgenstein Archives' activities is not adequately reflected in the structure of the project, neither in its internal staffing procedures nor in its institutional status within the University.

This results in a variety of inefficiencies, lost opportunities and uncertainties about future directions. Remedying these problems will require alterations in the nature of the staffing roles and an adjustment in the administrative status of The Wittgenstein Archives within the University of Bergen.

The Committee strongly recommends that the University recognize the success and potential of this project and act to secure and consolidate the project's achievements by addressing these problems. The Committee notes, however, that regardless of what measures it is practical to take at this time towards these ends, The Wittgenstein Archives is a successful project that is returning excellent value on its investment and should be continued.

1. Wittgenstein's Nachlaß

Although Ludwig Wittgenstein published very little during his lifetime, he left behind approx. 20,000 manuscript pages when he died in 1951. This *Nachlaß* contains manuscript pages with deletions, overwritings, shorthand abbreviations etc.,

and shows Wittgenstein's efforts to revise and rearrange his writings.

Wittgenstein gave the copyright of all his unpublished manuscripts after his death to his colleagues and friends G.E.M. Anscombe, Rush Rhees and Georg Henrik von Wright. They were asked to publish as many of his writings as they thought fit. The Trustees of the *Nachlaß* are today Professor G.E.M. Anscombe, Professor Georg Henrik von Wright, Professor Peter Winch and Sir Anthony Kenny.

In 1967 the known manuscripts, in the custody of the Wren Library in Cambridge, the Bodleian Library in Oxford and the Austrian National Library in Vienna, were microfilmed for Cornell University, New York. This microfilmed version is available in a number of university libraries.

A considerable part of the *Nachlaß* has been published in book form. The *Werksausgabe in 8 Bänden*, Suhrkamp Verlag, Frankfurt am Main 1989 comprises approx. 3500 pages and includes most of Wittgenstein's major published works.

The first attempt to edit a complete edition of Wittgenstein's writings was launched by The Tübingen Wittgenstein Archive in the 1970s. The team was led by H.J. Heringer and Michael Nedo, but the project did not succeed and did not publish a single volume. Nedo has, however, continued his effort to produce a *Gesamtausgabe* (Complete Works) and has over the years had the support of the literary executors and the *Fonds zur Förderung der wissenschaftlichen Forschung* (Austrian National Research Council) in Austria.

A joint venture of a number of Norwegian Wittgenstein scholars set up a committee to make the *Nachlaß* more easily available to scholars. The aim was not a book edition like the Tübingen project, but a computer-readable text which would be able to yield all necessary information on textual changes, corrections, alternatives etc.

The project, known as The Norwegian Wittgenstein Project started in 1981 and ended in 1987. When The Norwegian Wit-

tgenstein Project ended, approx. 3,200 pages had been transcribed and encoded.

The Norwegian Wittgenstein Project had not obtained the formal permission of the Wittgenstein Trustees. Without this permission, no continued financial support was available, and the project thus came to a standstill.

2. The Wittgenstein Archives at the University of Bergen

The Norwegian engagement in Wittgenstein continued, however, at the University of Bergen. In June 1990, the University of Bergen gave financial support to the Wittgenstein Archives at the University of Bergen for a trial period of 3½ years.

The primary ambitions and objectives of The Wittgenstein Archives project are as follows:

-   to produce a complete machine-readable version of the *Nachlaß*
-   to develop software for presentation and analysis of the texts
-   to give visitors and scholars at the University of Bergen access to the machine-readable transcriptions

The main argument for The Wittgenstein Archives project is that access to the *Nachlaß* material is limited by practical constraints and that the electronic Wittgenstein edition will allow computer-assisted analyses, such as retrieval, word frequency counts etc.

What The Wittgenstein Archives will therefore try to achieve is to prepare and distribute the entire *Nachlaß* in a readily accessible form, to enhance the availability of the encoded transcriptions with user-controlled programmes for presentation and analysis and to thereby encourage new research activity on Wittgenstein's philosophy.

The copyright aspect of the encoding and distribution of the *Nachlaß* was secured by an agreement of 23.01.90, which was followed up by an agreement in March 1992 between the University of Bergen and the literary executors of Ludwig Wittgenstein. This agreement states that:

- University of Bergen may register on computer storage media all of the *Nachlaß* to which the Executors' copyright pertains.
- University of Bergen may give scholars at the University of Bergen and its visitors access to the transcriptions stored in machine-readable form on location in Bergen.

The University of Bergen and The Wittgenstein Archives project have the permission to inspect and make copies of the *Nachlaß* material in Oxford, Cambridge and Vienna. The University of Bergen has exclusive, non-transferable permission to distribute and sell machine-readable transcriptions and machine-readable facsimiles of the *Nachlaß*.

3. Background for the Evaluation

The Senate of the University of Bergen decided on 03.05.90 to establish The Wittgenstein Archives for the period 01.06.90 until 31.12.93.

The Senate made the following specification:

> *"The question of an extension of the project will be considered on the basis of, among other things, a scholarly evaluation of the activity of the Archives."*

The Senate also made it clear that the project might be extended until June 1996 if it was given a favourable evaluation. The period from June 1990 to June 1996 was supposed to ensure the transcription and encoding of the whole *Nachlaß*.

The Faculty of Arts initiated the evaluation by appointing the following members of the Evaluation Committee in a letter dated 06.11.92:

- Professor Rudolf Haller, Graz
- Professor Kurt Erich Schöndorf, Oslo
- Dr. Allan Renear, Providence, RI, USA
- Academic Registrar Paul Stray, Tromsø

Prior to a site visit in Bergen from 18.-20.01.93, the Evaluation Committee was provided with written material consisting of:

* Annual reports from the Archives
* Selected transcriptions of the *Nachlaß*
* Project plans for the Archives
* Pre-prints, reports etc. from staff members

The Committee was given no terms of reference or specific mandate from the Faculty. It was understood that it was a general critical evaluation that was in question, including both a cost-benefit aspect and an analysis of the quality and importance of the transcriptions and encoding.

During the site visit to Bergen, the Committee interviewed the staff of The Wittgenstein Archives (Huitfeldt, Letnes and Pichler). The Committee had conversations with the Board of The Wittgenstein Archives, the rector, dean and administration of the University and the Faculty of Arts.

4. The Status Quo of The Wittgenstein Archives

As mentioned before, The Wittgenstein Archives has continued where the Norwegian Wittgenstein Project left off. The Wittgenstein Archives has, however, a different formal and organisational framework. It was established by the Academic Senate as an independent project within the Faculty of Arts.

The Wittgenstein Archives has two phases. The first period, running from 01.06.90 until 31.12.93, is planned as an independent first phase during which approx. 7,500 pages of a total of approx. 20,000 pages of the *Nachlaß* are to be processed. This

will mean that by the end of 1993 the transcriptions of the following manuscripts are expected to be complete:

* The *18 Bände* (volumes) from the 1930s (catalogue numbers 195-122)
* Nearly all the manuscripts from 1949-51 (catalogue numbers 170-177)
* The *Big Typescript* (catalogue number 213)
* Additional material from The Norwegian Wittgenstein Project

The period from 01.01.94 until 30.06.96 depends among other things on the evaluation made by this Committee. The aim of this second phase is to process the remaining part of the *Nachlaß* of approx. 12,000 - 13,000 pages.

To date, The Wittgenstein Archives has achieved its scheduled targets.

- The <u>Registration Standard</u> is complete and the encoding system has been functioning satisfactorily. The development of MECS - a Multi-Element Code System has proved to be of great importance and advantage to the project.
- <u>Specialised Software</u> has been developed and is functioning satisfactorily.
- Preparation of texts as of 01.01.93 shows that the following remains to be completed during 1993: conversion of 2,320 (of a total of 3,200) pages from The Norwegian Wittgenstein Project; transcription of 1,432 pages; proof-reading of 5,725 pages. By 01.01.93 6,062 pages were available in machine-readable form, approx. 3,200 of which were "prepared for use".

As of 01.01.93, The Wittgenstein Archives has a Project Director, Claus Huitfeldt, and two further staff members, Ole Letnes and Alois Pichler.

5. Evaluation of the transcription work

The Wittgenstein Archives has launched a project of transcribing and encoding the *Nachlaß* manuscripts, with their deletions, insertions, remarks and cross-references. Only 4,000-5,000 pages of the *Nachlaß* are in the form of typescripts, and many of these have been corrected by hand. In addition, Wittgenstein revised, rewrote and rearranged his manuscripts continuously.

The Committee members share the opinion that only a machine-readable version is of considerable benefit for scholars and researchers on Wittgenstein, providing many advantages over traditional print versions. In machine-readable form it is possible to record variant readings, deletions, cross-references etc. in Wittgenstein's writings with the highest degree of accuracy. In the near future machine-readable versions will become the standard technique for treating difficult texts such as the Wittgenstein *Nachlaß*.

The Committee has evaluated the code system for transcription of the *Nachlaß*. The code system employed by The Wittgenstein Archives is a formal language which is sufficiently rich and flexible to describe the relevant features of the source texts.

The Wittgenstein Archives' objective of being able to produce both a strictly diplomatic and a normalised, simplified version of each manuscript has been fulfilled. The Committee found that the source texts are reproduced accurately and truthfully and that the code system allows for the necessary amendments, documentation and comments.

The encoded and transcribed texts contain a very suitable reference system, and the examples the Committee has chosen could be traced back to their exact place of origin in the *Nachlaß*.

The Wittgenstein Archives' machine-readable version of the *Nachlaß* is in every detail as true to the original as possible.

The encoding accurately represents the logical structure of the text. The Wittgenstein Archives has successfully maintained a practical distinction between *interpretation and representation*.

The Committee members share the opinion that a diplomatic, computerised version is best used for certain scholarly purposes in conjunction with the original, or with photocopies or a facsimile version. Use of the original material will for all formal and practical purposes by beyond each scholar's possibility, even when the material is released for public use in 2001. The present quality of the Cornell photocopies is so low that it cannot be regarded as a scientific edition for research on Wittgenstein.

The Committee agrees with The Wittgenstein Archives that it will be of importance to distribute the *Nachlaß* on CD-ROM or other mass storage media. This should be achieved by making a facsimile edition of the *Nachlaß* on CD-ROM which can be used in conjunction with The Wittgenstein Archives' machine-readable texts.

On this basis it would be possible to prepare a printed edition of the Collected Works of Ludwig Wittgenstein. A diplomatic edition based on The Wittgenstein Archives' transcriptions and a critical (scholarly) edition will be feasible.

5.1 Conclusion and recommendation as to the transcription and encoding processing

The Committee was impressed by the standard and accuracy of the transcriptions and reproductions specifically chosen by the Committee. MECS - the Multi-Element Code System developed and applied by Claus Huitfeldt and The Wittgenstein Archives' staff members - and the connected registration standard are regarded as flexible and appropriate tools for the transcription work.

The Committee will recommend that the same procedures for transcription used in the first period of The Wittgenstein Archives will be continued into the next period.

It is also strongly recommended that the combined edition of a machine-readable version of the *Nachlaß* and a CD-ROM facsimile version of the manuscripts is made possible. This will be the responsibility of the University according to the agreement of March 1992 between the literary executors and the University of Bergen.

6. Evaluation of the contribution of the staff members

During the first period of the project, running from June 1990 to January 1993, the staff of The Wittgenstein Archives have, in addition to the transcription and encoding work, published a number of papers.

The Wittgenstein Archives has also been - and will probably continue to be - the basis for a number of publications and papers written by scholars both at the University and from other countries.

The staff members have subsidised the running of the project with their private initiative and enthusiasm. They have achieved more than might be expected under normal conditions for academic work and project-running in Norway.

Both the quality and quantity of actual texts that have been transcribed and encoded, and the elaboration of an international network for Wittgenstein research on the *Nachlaß*, are results of the efforts made by the staff.

In particular, the work carried out by Claus Huitfeldt should be emphasised. The initiative and leadership qualities he has displayed have strongly impressed the Committee. His scientific insight and skill, his management talents, his handling of difficult situations, his efficiency and his ambassadorial talents in the complicated negotiations and promotion of the project, must be given credit in this report.

The high standards and demand for accuracy requires staff members with high academic training, qualifications within philosophy and philology, and the ability to assist visiting Wittgenstein scholars at a high level.

The present staff members have the necessary qualifications, but they are not granted sufficient opportunity to exploit their philosophical and philological abilities. They have brought the project beyond the limit of an ordinary transcription project, but they have not been enabled to carry on in the direction of an academic research project where transcribing and encoding are just two of several elements in the context of Wittgenstein research.

Transcription projects such as The Wittgenstein Archives are intellectually challenging enterprises that require academic staff with the highest degree of expertise. Without such staff they fail, as the notion of mechanical transcription which can be carried out by clerical staff is irrelevant to the process of scientific editing such as is being undertaken by The Wittgenstein Archives.

The staff members have contributed to a project which among other things comprises an encoding-processing procedure of high quality and great interest internationally. This computer-scientific aspect of the project has been necessary to produce both the transcriptions of the texts and access to the structure

of the *Nachlaß*. Furthermore, these two elements constitute the basis for the third element, the facsimile edition together with the machine-readable version of the *Nachlaß*.

The Wittgenstein Archives has been fortunate in having the present staff. Without an opportunity to fully exercise their interest in research, it will not be possible to retain such staff for very long. The most natural and efficient sort of staff role is the one that combines research and transcription, reflecting their natural inter-relation in projects such as The Wittgenstein Archives. If no research component is available, transcribers with the required skills cannot be recruited and retained.

6.1   Recommendations as to the staff members' contributions

The Committee will strongly recommend that the staff members of The Wittgenstein Archives be given the opportunity to engage in individual research activity as a running part of the transcribing and encoding process.

The work completed in the first period from June 1990 to January 1993 is of high quality.

It is not possible, however, to foresee further activity of the same high quality without any kind of opportunity for individual research on Wittgenstein's text and philosophy.

The Committee will also recommend that the number of staff members be increased in order to reach the target of finishing the transcription of the complete *Nachlaß* by June 1996. This aim may be achieved by employing transcribers on a purely philological and philosophical basis, thereby restricting the project to transcription alone.

This solution is foreseen in the project plan from 1990. The initial phase of The Wittgenstein Archives has shown that the running of a project of that standard can only be based on short-term employment of qualified staff members. The work

of transcribing and encoding will not appeal to highly qualified staff members over a longer project period.

It is therefore the conclusion of the Committee that if the high quality of the work is to be maintained in the envisaged second phase of the project, alterations must be made to the working conditions of the staff members.

The Committee will recommend:

* The Project Director should be a full-time directing manager of The Wittgenstein Archives. After his PhD thesis has been presented, Claus Huitfeldt must be given a position that gives him the research possibilities equivalent to associate professor at the University.
* The staff members at The Wittgenstein Archives must be regarded as recruits in philosophy and in Wittgenstein's philosophy. This includes also philologists who want to specialise in Wittgenstein or philosophical texts. In addition, there ought to be possibilities for recruits in computer science for the humanities.
* A part-time programmer must be added to the staff so that the Director is not distracted by software development issues. There is also a need for secretarial assistance in the running of the project.

7. Organisation and administration of The Wittgenstein Archives

The Committee has been somewhat troubled by the lack of concise strategies and plans for The Wittgenstein Archives' activities after a second project period. What will happen after 1996?

By interviewing the staff members and having conversations with members of The Wittgenstein Archives' Board and the Faculty of Arts, the Committee realised that there was no adequate answer to this question.

This absence of precise plans and strategies may reflect the uncertain status The Wittgenstein Archives already has within the University structure. Being an independent project within the Faculty of Arts, The Wittgenstein Archives is not a part of the Department of Philosophy and thereby an integrated element of the priorities with regard to future scholarly activity concerning Wittgenstein specifically or philosophy in general. The Committee is aware of the fact that the staff at The Wittgenstein Archives are formally connected to the Department of Philosophy, but this does not affect The Wittgenstein Archives' practical status or the functioning of the project.

The Committee is aware of the fact that it was not asked to give an estimated opinion of the future activities of The Wittgenstein Archives after 1996, but it will not be possible to give an evaluation if the crucial question of continuity and return on investment for the period 1990-1996 is to be excluded from an evaluation report.

The organisation and administration of The Wittgenstein Archives within the existing framework in the period 1990-96 will have an impact on the activities after this point. The Committee has regarded the existing aspects of The Wittgenstein Archives' organisation and administration independently

from the post-1996 period, but will at the end of this section give a brief summary of what may be the best future options for The Wittgenstein Archives.

7.1   Organisation 1990-1993

The Committee is impressed by the fact that The Wittgenstein Archives has been able to achieve so much with its present organisational status. The fact that it has succeeded is due to the work carried out by the staff members and in many cases despite the organisational form they are dependent upon.

The primary weakness of the project is its uncertain status. Is it a scholarly project where the transcription and encoding are tools used to increase the quality and quantity of research on Wittgenstein? The issue is whether the University will grant a status that reflects the scientific impact of the project and thereby allows a more efficient and beneficial project, or whether the University will continue to minimize its status as a scholarly project.

The uncertain status is clearly expressed by the fact that Claus Huitfeldt, Project Director, has the status of a PhD student with a scholarship from the Norwegian Research Council. He will probably present his thesis in 1993. His scholarship expires this summer and there appears to be no precise information as to what his status and position will be after this period.

The uncertain status is also reflected by the fact that Ole Letnes and Alois Pichler are both applying for scholarships in order to pursue their own academic careers. In the case of Ole Letnes, the Wittgenstein material is of minor interest compared to his specialised field of research, but for Alois Pichler the *Nachlaß* is already his field of research.

Pichler has previously expressed an interest in being given an opportunity to carry out his own research by reducing the time he has to spend on transcription work. This was not possible because of the weak financing of the project and because

of its organisational framework. Pichler is engaged as in a position which in the Norwegian system does not include any form of individual research activity.

 The Committee was also concerned by the fact that The Wittgenstein Archives had no organisational link to the Department of Philosophy apart from the department's representation on The Wittgenstein Archives' Board. Without an integration of a research project such as The Wittgenstein Archives into a permanent organisational unit such as a department, there is no close link between the project and the priorities and strategies for future philosophical activities.

This may be compensated to a certain extent by a professional board that can have authority and influence in relation to the strategy-making of the permanent bodies within the University. As far as the Committee has observed, this had to a certain degree happened in the case of The Wittgenstein Archives. On the other hand, it is natural to observe that no board will be able to give an independent project such as The Wittgenstein Archives a status equal to ordinary research projects run by a department.

As the Committee has pointed out previously in this report, the uncertain status of the staff members within the organisation and the independent status of The Wittgenstein Archives within the University framework, in particular with regard to future strategies and priorities, can be regarded as an uncertainty as to the future activity after 1996.

7.2   Recommendations

The recommendations that the Committee will make are as follows:

* The Project Director must be given a full-time position in order to run the project.
* The staff members must be given the opportunity to engage in individual research activity and The Wittgenstein Archives must therefore be organised as a research project for the rest of the period, that is until June 1996

* After the presentation of his PhD thesis Claus Huitfeldt must be given a position that allows him to continue his research on a post-doctoral basis.
* The Wittgenstein Archives will profit from being integrated as an independent research project or a scientific centre within the framework of the Department of Philosophy. It is necessary to elaborate specific strategies as to the Wittgenstein activities at the University of Bergen in the post-1996 period.

8. The status of The Wittgenstein Archives after 1996

Even if The Wittgenstein Archives should not succeed in transcribing the entire 20,000 pages of the *Nachlaß* within the next project period, the Committee is convinced that what has been achieved so far and what may be achieved in the next period, is of the greatest importance to philosophical research on Wittgenstein.

The Wittgenstein Archives is already well known outside Norway and enjoys a high reputation with regard to the computer-scientific quality and philosophical environment.

The investments made by the University have produced an acceptable return for scholars all over the world. As the Committee has stated in its report, the cost-benefit aspect is even better than one might expect. This is due to the work carried out by the staff and in particular by Claus Huitfeldt.

The Committee will strongly recommend that The Wittgenstein Archives be established as a permanent body at the University of Bergen. It seems that the status as a permanent research centre on Wittgenstein may represent the best way to continue the effort already displayed by the University of Bergen. The Committee would therefore suggest that The Wittgenstein Archives is transformed into a permanent "The Wittgenstein Research Centre" at the University of Bergen.

9. Appendices

In order to elaborate some specific points made in this report, the Committee has enclosed the following papers:

Appendix A:

* *The Wittgenstein Archives at the University of Bergen. Technical Report.*

Dated 15.03.93 and submitted by Dr. Allen Renear.

Appendix B:

* *Additional comments to Paul Stray's evaluation report on the work of The Wittgenstein Archives in Bergen.*

Dated 10.03.93 and submitted by Prof. Dr. K.E. Schöndorf (originally in German).

Appendix C:

* *Comments and critical evaluation of The Wittgenstein Archives at the University of Bergen. (A short addition to the final report of the Evaluation Committee.)*

Dated 29.03.93 and submitted by Univ.-Prof. Dr. Rudolf Haller (originally in German)

Appendix A

The Wittgenstein Archives
at the University of Bergen
Technical Report

March 15, 1993
Dr. Allen Renear
Computing and Information Services
Brown University, Providence RI, USA

Contents

About this Document

This report comments specifically on the technical aspects of The Wittgenstein Archives at the University of Bergen: text encoding systems, transcription methodology, textbase development, research on encoding and transcription, organization

of work and workflow, and so on. It does not repeat analyses or conclusions already presented in the joint document submitted by the evaluation committee.

Summary

The Wittgenstein Archives at the University of Bergen is recognized internationally as a pioneering text encoding project that is a leader in the development of transcription and encoding methodology and the source of important research on the theory of text encoding. Its Registration Standard (MECS-WIT) is one of the most sophisticated and subtle encoding languages ever developed. The Wittgenstein Archives is, in summary, a very successful project with substantial scientific accomplishments and considerable international prestige and influence.

This report makes few criticisms - because few grounds for any substantial criticism, relevant to a report of this kind, were found. However it does make a number of recommendations that are in the nature of commending or confirming activities or directions already underway, in varying degrees, at The Wittgenstein Archives. Prominent as a theme of several of these recommendations is the importance of continuing to aggressively research The Wittgenstein Archives' encoding system and methodology, analyzing its relationship and significance for other methodologies, and then actively representing these findings to the broader community of text encoders and theoreticians of text encoding. This research can be pursued directly or it can be the indirect result of research projects that focus on the linguistic, philosophical, or historical content of the textbase.

Background

The preparation of machine-readable texts in the humanities is at least as old as Father Roberto Busa's Thomas Aquinas project, which began in 1951. However in the last 10 years

there has been not only an enormous increase in the number of such projects, but a corresponding increase in the technical and theoretical sophistication with which they are conducted. This is connected with the general recognition that with the growing importance of computing and telecommunications machine-readable texts will be at the center of not only the transmission and study of cultural knowledge, but of scientific work of all kinds.

There also has been a growing recognition that the process of text encoding is a scientifically complex one that essentially involves many central issues in textual editing, literary inter- pretation, linguistics, communication theory, and knowledge representation. Many subtle and difficult problems in these areas present themselves both to the practical encoder and the theoretician of encoding. And more and more we are seeing that efforts to address these problems as they arise in the con- text of encoding ultimately sheds new light on their original and traditional formulations in other disciplines. Encoding is thus not only a matrix for the representation of these founda- tional problems, but it is proving to be a heuristic device for eliciting new perspectives and solutions.

At the center of this work has been the development of formal encoding systems for text representation. Today the focus of this effort is the Text Encoding Initiative (TEI). The TEI is an international project to standardize the encoding of linguistic and literary texts.[14] The TEI *Guidelines*, the first complete pub- lic draft of which will be released in June.[15] The encoding sys- tem described in the *Guidelines* is an application of the an ISO standard "meta-grammar" for describing encoding languages, SGML: the Standard Generalized Markup Language (ISO8879).[16]

MECS and MECS-WIT - The Wittgenstein Archives' Registration Standard

The encoding system for the texts of The Wittgenstein Archives at the University of Bergen is based on MECS -

Multi-Element Code System -which was developed by Huit-feldt between 1985 and 1992.[17] MECS is a general-purpose syntax for designing encoding systems or registration standards. The specific registration standard used at The Wittgenstein Archives is an application of the MECS syntax that is referred to as MECS-WIT.[18]

MECS is a system of extraordinary power, sophistication, and flexibility, surpassing even SGML in some respects. It is itself a very significant scientific accomplishment that is having a considerable influence on the ongoing efforts in applied and theoretical work in text encoding. It is currently particularly influential in certain circles of the TEI which are discussing problems that do not appear to have been adequately resolved

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14. Founded in 1987 the TEI is sponsored by the Association for Computational Linguistics and the European and North American Humanities computing societies: the Association for Literary and Linguistic Computing, and the Association for Computing and the Humanities. It consists of an advisory board of representatives from scholarly and scientific professional societies, and over 100 scholars organized into working groups and committees. Two editors, Michael Sperberg-McQueen of the University of Illinois and Lou Burnard of Oxford University, lead the effort, guided by a steering committee of the sponsoring organizations. The TEI is sponsored by the European Commission (Directorate VIII), the US National Endowment for the Humanities, the Mellon Foundation, and the Canadian Council for the Humanities and Social Sciences.

15. The current draft is *Guidelines for the Encoding and Interchange of Machine-Readable Texts*, TEI P1, Draft Version 1.1, edited by C. Michael Sperberg-McQueen and Lou Burnard, (Chicago and Oxford: Text Encoding Initiative) 1990.

16. *Information Processing - Text and Office Systems - Standard Generalized Markup Language* (SGML), ISO 18879-96, International Organization for Standardization, Geneva 1986.

17. Claus Huitfeldt: *MECS - A Multi-Element Code System*, Working Papers from the Wittgenstein Archives at the University of Bergen, No. 3, Bergen 1992.

18. Claus Huitfeldt: *MECS-WIT - A Registration Standard for the Wittgenstein Archives at the University of Bergen*, version 1.02 (26.02.92) in private circulation; forthcoming in the Working Papers from the Wittgenstein Archives at the University of Bergen.

in the emerging TEI Guidelines - these problems are handled differently, and perhaps more adequately, in MECS.[19]

Of course there are various issues raised by MECS that are matters of difference and controversy in the text encoding community. However the present author knows of no criticisms that can be made of MECS or MECS-WIT that are relevant to this report or to the present evaluation of The Wittgenstein Archives. These systems are major contributions to text encoding - both theory and practice. - and are admired and studied by all serious encoding researchers.

The substance and significance of MECS and MECS-WIT, as scientific achievements cannot be overemphasized. The reader is strongly encouraged to examine the MECS and MECS-WIT documentation mentioned for an indication of the expressive power, subtlety, and theoretical sophistication of these systems.

Although MECS-WIT is extraordinarily sophisticated in its handling of difficult cases in textual criticism and text-related knowledge representation, the present author recommends that even more effort be made to relate the analysis and commentary in MECS-WIT to current issues in traditional textual editing. While it is not clear that MECS-WIT or The Wittgenstein Archives itself would benefit substantially from this, such connections would broaden the scope of influence of The Wittgenstein Archives text encoding research by making more apparent its wide applicability.

MECS, MECS-WIT, SGML, and TEI

SGML is a "meta-grammar" and TEI is an encoding system whose lexicon and grammar are specified using SGML. MECS is similar to SGML in being a general syntax for the design of

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19. See for example Allen Renear, Elli Mylonas, and David Durand: "The Problem of Overlapping Hierarchies - Refining our Notion of What Text Really Is", in *Research in Humanities Computing*, Nancy Ide and Susan Hockey, eds., Oxford University Press, forthcoming in 1993.

encoding systems - and just as TEI is a specific encoding system defined in SGML, MECS-WIT is a specific encoding system defined in MECS.

Two questions naturally arise:

- why is The Wittgenstein Archives not using TEI, or some other SGML application?
- should The Wittgenstein Archives convert its data files to TEI or some other SGML application?

These questions, which have been taken very seriously by The Wittgenstein Archives, are answered in full in a paper recently prepared by Huitfeldt.[20] In brief he argues that SGML (and hence TEI) is not suited to the project: it does not have sufficient expressive power, it is cumbersome, and it imposes restraints that are arguably inconsistent with the editorial philosophy of The Wittgenstein Archives. He also notes that in 1990, when MECS-WIT was developed, the TEI Guidelines were still clearly some way away from completion. Although not all points in the argument are beyond criticism or qualification, in sum it is convincing.

Should The Wittgenstein Archives switch from MECS-WIT to TEI or SGML? Although the present author is extensively involved in TEI development, serving on a number of working groups and representing the American Philosophical Association on its Advisory Board, he would recommend *against* replacing the MECS-WIT format with TEI. Huitfeldt's arguments in the paper referenced above remain convincing. Moreover, MECS-WIT is now a proven system of extraordinary power. TEI remains still untested, at least on projects such as this one. In fact recent internal criticisms of SGML and TEI have been motivated by problems which MECS-WIT handles easily but SGML (and therefore TEI) handles very poorly. In these discussions MECS-WIT figures as an example of a

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20. Claus Huitfelt: "MECS - A Multi Element Code System", to be given at ACH-ALLC 1993 in Washington DC, June 1993. Seen in draft.

possible way of solving these problems. Finally, it is noted that SGML and even TEI are explicitly not intended as local representation formats, but rather as general interchange formats, recognizing that local formats for textbases will vary considerably.

However, it is recommended that The Wittgenstein Archives continue its research into the formal relationships between MECS-WIT and SGML and continue to present the results to the encoding community. Excellent work has already been done in this regard by Huitfeldt in 1989.[21] and it is clear that Huitfeldt is closely following SGML developments. The relationship between MECS and SGML, and MECS-WIT and TEI, should eventually be documented sufficiently to support development of translation and inter-operable software. It appears from work already done by Huitfeldt that translation programs could enable MECS-WIT texts to be (at least partially) represented as SGML-TEI texts for the purposes of software retrieval, manipulation and analysis.

Since 1990 Huitfeldt has worked closely with the TEI and in 1992 he agreed to be head of the TEI manuscript group. This is to be strongly commended and it is recommended that the ties between The Wittgenstein Archives and the TEI, and TEI affiliated projects, be kept as strong as possible.

Organization of Work

(The inclusion below of several subsections - Transcription, Programming, Research on Encoding, General Workflow and Practices - is not intended as a classification, exhaustive or otherwise, of the work of the project. They are simply some areas about which the present author wishes to make some remarks.)

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21. Claus Huitfeldt: *MECS - A Multi-Element Code System,* Working Papers from the Wittgenstein Archives at the University of Bergen, No. 3, Bergen 1992. pp. 27-31.

Transcription

Various sorts of transcription practices are in use in different encoding projects. The Wittgenstein Archives uses an approach which requires considerable sophistication - linguistic, editorial, and philosophical - on the part of the transcriber. This approach, to some extent pioneered by The Wittgenstein Archives, is highly regarded by the encoding community and considered particularly well-suited to the sophisticated manuscript texts such as those found in the *Nachlaß*. It has certainly served The Wittgenstein Archives very well indeed. However the theoretical foundation for this approach needs to be further analyzed and presented for criticism to the scholarly community.[22] This will not only benefit the broader community but will give The Wittgenstein Archives criticism necessary to refine their techniques.

Programming

Programming has focused on tools for the support of the development of the textbase (text entry and validation) and basic formatting of the text in various versions. (diplomatic, normalized, and reading). These tools are software programs of very impressive sophistication. However it is unfortunate that it was necessary for this programming to be done by the Project Director, Huitfeldt. Although Huitfeldt believes that the necessary programming now has been accomplished, the author of this report is sceptical. There are almost inevitably more alterations and enhancements to be made and even routine software maintenance is notoriously more time-consuming than initial development. It is therefore recommended that a part-time programmer by added to The Wittgenstein Archives' staff and that all other staff members avoid any pro-

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22. For instance, the recent paper by Wittgenstein Archives' staff member Alois Pichler, "What is Transcription, Really?" 1992 (seen in draft), is a good example of the sort of work in this area that needs to be done.

gramming; instead they should develop designs and specifications that will be implemented by the programmer.

Workflow and General Practices

The organization of technical work of transcription, validation and the associated auxiliary services of software and hardware maintenance, data security, etc. are excellent and cannot be faulted in any way. The documentation of the encoding system and transcription practices is perhaps the best the present author has ever seen.

Research on Encoding and Transcription

Although it has been mentioned already it bears repeating that the achievements of The Wittgenstein Archives in encoding systems, transcription methodology, validation, and so on, must be aggressively presented, along with their associated theoretical analysis, to the broader scientific community. This is not only in order to benefit that community, but also to benefit The Wittgenstein Archives by (1) eliciting constructive criticism and (2) by encouraging, in other researchers to do further work in the directions The Wittgenstein Archives has chosen. The Wittgenstein Archives has done a very good job of these things, but it should be strongly encouraged to continue and even increase this effort.

Future Directions

As more and more of the *Nachlaß* is encoded there will be increasing opportunities for projects that develop mechanisms for presenting these machine-readable texts and helping scholars make use of them. This is very important to the effectiveness of The Wittgenstein Archives and is an area that it will soon need to become much more involved in. However such projects often require extensive software development. It is strongly recommended that extreme caution be exercised by The Wittgenstein Archives in engaging in software develop-

ment projects as the principal sponsor. The core expertise and competence of The Wittgenstein Archives is in textbase development and the related scholarship and research, not software engineering. It is recommended that The Wittgenstein Archives only undertake software development projects in partnership with other organizations, such as the Norwegian Computing Center for the Humanities at the University of Bergen, who will provide the software engineering infrastructure.

Recommendations

The Wittgenstein Archives at the University of Bergen is recognized internationally as a pioneering text encoding project; it is a leader in the development of transcription and encoding techniques and the source of much sophisticated research on the theory of text encoding. This is a very successful project by any measure, a credit to the University of Bergen, and a very productive investment of public money. There are no technical criticisms relevant to this report. The following recommendations are in the nature of commending the selected Wittgenstein Archives' activities that are crucial to the project's health and success.

- The achievements of The Wittgenstein Archives in encoding systems, transcription techniques, validation, and so on must continue to be actively presented, along with their associated theoretical analysis, to the broader scientific community.
- The Wittgenstein Archives should continue its research into the formal relationship between MECS and SGML and between MECS-WIT and TEI and continue to present the results of these studies to the encoding community. Eventually these relationships should be understood and documented sufficiently to support the development of format translation tools and inter-operable software. The Wittgenstein Archives should *not* switch from MECS-WIT to TEI or another SGML application

- Project staff should increase their level of participation in text encoding standardization projects, professional conferences, and collaboration with other projects.
- Project staff should continue to relate the analysis and research (and especially the commentary in MECS-WIT, 1992) to current issues in the theory of textual editing, text linguistics, communication theory, and knowledge representation.
- A part-time programmer should be added to the project staff. No programming should be done by the project staff; instead the Director, or staff designated by him, should develop the designs and specifications to be implemented by the programmer.
- The Wittgenstein Archives should prepare to become increasingly involved in projects that are developing mechanisms for presenting the textbase or in other ways enhancing its use by researchers. For instance, tools for retrieval, analysis, navigation, semantic networks, hypertext linking, etc.
- However, The Wittgenstein Archives should avoid engaging in major software development projects as the principal sponsor. In general The Wittgenstein Archives should only undertake software development projects in partnership with other organizations, such as the Norwegian Computing Center for the Humanities at the University of Bergen, that can provide the software engineering infrastructure.

Appendix B:

Prof. Dr. K.E. Schöndorf, Germanistisk Institutt, Universitetet i Oslo

Additional comments to Paul Stray's evaluation report on the work of the Wittgenstein Archives in Bergen (edited English version)

It must first of all be emphasised that I fully agree with most of the points in this evaluation, particularly with regard to the quality of the work so far and the suggestions for organisation and working methods for a second project period, should the University of Bergen decide to support a continuation of The Wittgenstein Archives' activities.

I would, however, like to express my doubt concerning Stray's estimation of the amount of work still to be achieved in 1993 and in a possible second project period 1994-1996. I feel that the considerations made are too optimistic, or too vague in their formulation.

1. As of 01.01.93 6,062 pages of the Wittgenstein *Nachlaß* were available in machine-readable form and approx. 3,200 pages were "prepared for use", whereby it is not explained what level of use "prepared for use" refers to. The Faculty of Arts should ask the employees of The Wittgenstein Archives to provide an exact explanation of the level of use possible for the texts processed so far.

    Considering the pace of work so far and the available working hours for the respective employees (Pichler's planned reduction in hours, Huitfeldt's PhD etc.), it is difficult to rely on 2,320 pages from The Norwegian Wittgenstein Project being converted, 1,432 pages being transcribed and 5,725 pages being controlled. According to the Wittgenstein Archives, it is possible to transcribe 7½ and proof-read 28 pages per day. No time estimates were made for converting texts.

2. There are still 12,000 to 13,000 pages of varying quality to be transcribed during a possible second project period (1994-1996). With regard to copyright and publication rights, these pages ought to be processed as quickly as possible. On questioning the employees Pichler and Letnes, however, it became clear that they were both experienced transcribers, but that neither could guarantee being available for a second project period: e.g. Letnes is applying for a lectureship in German in Stavanger, and Pichler is planning a stay in Poland. Thus, if a smooth transition is to be achieved, new employees will have to be recruited in the second half of 1993, so that they have half a year to settle into the working methods of the Archives. If a change of employees does not occur until after 01.01.94, there will be an immediate setback in the pace of the project.

From the experience gained during the period 1990-1992, it is clear that it is insufficient to have just two employees for the text processing tasks, plus project director. The Faculty of Arts should recognise this fact and acknowledge the consequences. At least 4 people should be made available if one wants to avoid frustration and overtime. The deciding authority should accept that a project such as this one, which will bring prestige to the University, must also be given an acceptable organisational framework.

3. If the reception of visiting researchers, both domestic and foreign, is to continue to be a part of The Wittgenstein Archives' activities -one should certainly not cease to receive such visitors - it would be sensible to retain the practice of guidance on the part of the Archives' employees. Furthermore, I feel it would be appropriate to consider whether certain ground rules should be established in order to clearly distinguish between the work of a visiting researcher and the work of an employee of the Archives. It is not good for the reputation of The Wittgenstein Archives in Bergen if misunderstandings arise con-

cerning to what extent a visiting researcher's personal work can or cannot be used by the Wittgenstein Archives.

I regard the matters described here primarily as a clarification of individual points which were mentioned in the general evaluation, but whose consequences I felt needed to be expanded upon.

Kurt Erich Schöndorf

Appendix C:

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Comments and critical evaluation of The Wittgenstein Archives at the University of Bergen. (A short addition to the final report of the Evaluation Committee) (edited English version)

During the last 15 years, the undersigned has had the opportunity to follow the progress of the various editing projects centred on Ludwig Wittgenstein's *Nachlaß*. Since participating at the *Tübinger Tagung* in 1977, where the focus of attention was on the joint project of the University of Tübingen and the Thyssen-Stiftung to create a computer-based machine-readable transcription of Wittgenstein's manuscripts, I have kept up-to-date with the various transformations of this project (Heringer-Nedo) and its successors. I was thus informed of the first Norwegian project, which received transcriptions from Professor Heringer, and I was also a referee for the project supported by the Austrian *Fonds zur Förderung der wissenschaftlichen Forschung* (Nedo). My acquaintance with Claus Huitfeldt stems from the time of The Norwegian Wittgenstein Project. I was informed of the founding of The Wittgenstein Archives by the University of Bergen and have been kept up-to-date concerning its plans and activities. Thanks to an invitation from the Faculty in Bergen in December 1991, I was able to gain an early insight into the theoretical and practical prerequisites as well as the working methods of The Wittgenstein Archives.

In addition, I have met and discussed the problems of editing the *Nachlaß* with Professor Peter Winch, one of the Trustees of the Wittgenstein Nachlaß. (The same now applies for Sir Anthony Kenny, who held a lecture on *Plans for the Publication of the Wittgenstein Nachlaß* at the Symposium *On Critical Edit-*

ing in Philosophy and Science in Boston on 18th and 19th March this year.)

On the basis of this general and - in the case of The Wittgenstein Archives - specific background knowledge, I would like to add the following to the general evaluation report:

It is impressive how fast The Wittgenstein Archives has progressed in the continuation of The Norwegian Wittgenstein Project, especially with respect to the development of the Registration Standard and associated software. The use of, or rather the development and refinement of, the Multi-Element Code System (MECS) appears to have solved many of the previous problems. The number of manual operations to carried out *after* the text transcription now seem minimal.

I would like to leave it as an open question as to whether it is true that *only* a machine-readable version is of considerable value for research. The "ideological" camps are split with regard to 'the best text presentation', as was also apparent at the Boston Colloquium on Critical Editing. One should not let the enormous advantages of machine-readable versions become a point of contest by attaching extra value to them. The advantages are, however, clear to me. But their price is the same as that of any other critical edition. The price paid consists of experienced, difficult and time-consuming "handicraft", as the work of transcription cannot be replaced by any machine process (scanner).

The level of The Wittgenstein Archives' transcription work is exceptional, whereby the differentiation between representation and interpretation of text is both consistent and achieves an amazing and highly satisfactory result. The reproductions of the machine-readable texts demonstrate that various different versions are possible, right through to the "readable" full text expected by the reader of a book edition. The end user at the Archives can therefore select either a full version or a reduced "readable" version. In addition, the software developed so far enables the user to make use of specific search programs.

Taking into consideration the work that has gone into establishing The Wittgenstein Archives at the University of Bergen, developing MECS and other necessary software, it can be constituted that a high level of achievement has been attained.

It is true, however, that the time estimates are too optimistic, as is often the case in such projects. In my opinion the stated goal can only be achieved given 4 full-time transcription employees from now until the end of 1996. If an experienced employee either leaves or is for some reason unavailable, or if there is a change of employees, there will be additional delays.

I would therefore like to emphasise the *Recommendations* section of the Evaluation Report. Finally, it would appear to me to be sensible to encourage close cooperation and organisational links between The Wittgenstein Archives, the Department of Philosophy and the University Library.

There is no doubt that the majority of the Trustees of Wittgenstein's *Nachlaß* now fully accept The Wittgenstein Archives and hope that the work in Bergen will also provide a positive contribution to a possible book edition. Sir Anthony Kenny is one of those who is an enthusiastic defender of computer-based databases, publications etc. In 2002, however, the copyright on Wittgenstein's work runs out in Great Britain. It thus appears important that all effort is made to keep up the pace of the project, especially as the above-mentioned Nedo project has also been continued. The same material - about 15,000 pages (!), according to Mr. Nedo's declaration to the evaluation committee of the Austrian Research Council - has been transcribed. In fact, 6 volumes (MS 107ff.) of the manuscript volumes of *Philosophische Bemerkungen* have been in the hands of the Research Council in Vienna since the beginning of 1993. The Trustees have agreed to their publication.

I regard it as necessary to mention this point, as it should emphasise the importance of a generous decision on the part of the Faculty in Bergen.

Rudolf Haller

Skriftserie fra Wittgensteinarkivet ved Universitetet i Bergen:
Working Papers from the Wittgenstein Archives at the University of Bergen:

No. 1:   Alois Pichler: "Ludwig Wittgenstein, Vermischte Bemerkun-
            gen: Liste der Manuskriptquellen – Ludwig Wittgenstein, Cul-
            ture and Value: A List of Source Manuscripts", 1991.
            ISBN 82-91071-00-4. 52 pages. German-English parallel text.
            Price NKr 50.

No. 2:   "The Wittgenstein Archives at the University of Bergen –
            Background, Project Plan and Annual Report 1990", 1991.
            ISBN 82-91071-01-4. 60 pages. Norwegian-English parallel
            text. Free.

No. 3:   Claus Huitfeldt: "MECS – A Multi-Element Code System", 1992.
            (Forthcoming 1993, approx. 150 pages.)
            ISBN 82-91071-02-0. English. Price NKr 150.

No. 4:   "The Wittgenstein Archives at the University of Bergen –
            Annual Report 1991", 1992.
            ISBN 82-91071-03-9. 47 pages. Norwegian-English parallel
            text. Free.

No. 5:   Paul Henry and Arild Utaker (eds.): "Wittgenstein and Con-
            temporary Theories of Language", Papers read at the
            French-Norwegian Wittgenstein seminar in Skjolden, 23-26 May
            1992.
            ISBN 82-91071-04-7. 251 pages. English. Price NKr 200.

No. 6:   Peter Philipp and Richard Raatzsch: "Essays on Wittgen-
            stein", 1993.
            ISBN 82-91071-05-5. 178 pages. English. Price NKr 150.

No. 7:   Michael Biggs and Alois Pichler: "Wittgenstein: Two Source
            Catalogues and a Bibliography", Catalogues of the Published
            Texts and of the Published Diagrams, each Related to its
            Sources, 1993
            ISBN 82-91071-06-3. 175 pages. English. Price NKr 200.

No. 8:   Alois Pichler: "Untersuchungen zu Wittgensteins Nachlaß",
            1994 ISBN 82-91071-07-1. 241 pages. German. Price NKr 250.

No. 9:   "The Wittgenstein Archives at the University of Bergen:
            Project Report 1990-1993 and Critical Evaluation", 1995
            ISBN 82-91071-10-1. 107 pages. English. Free.