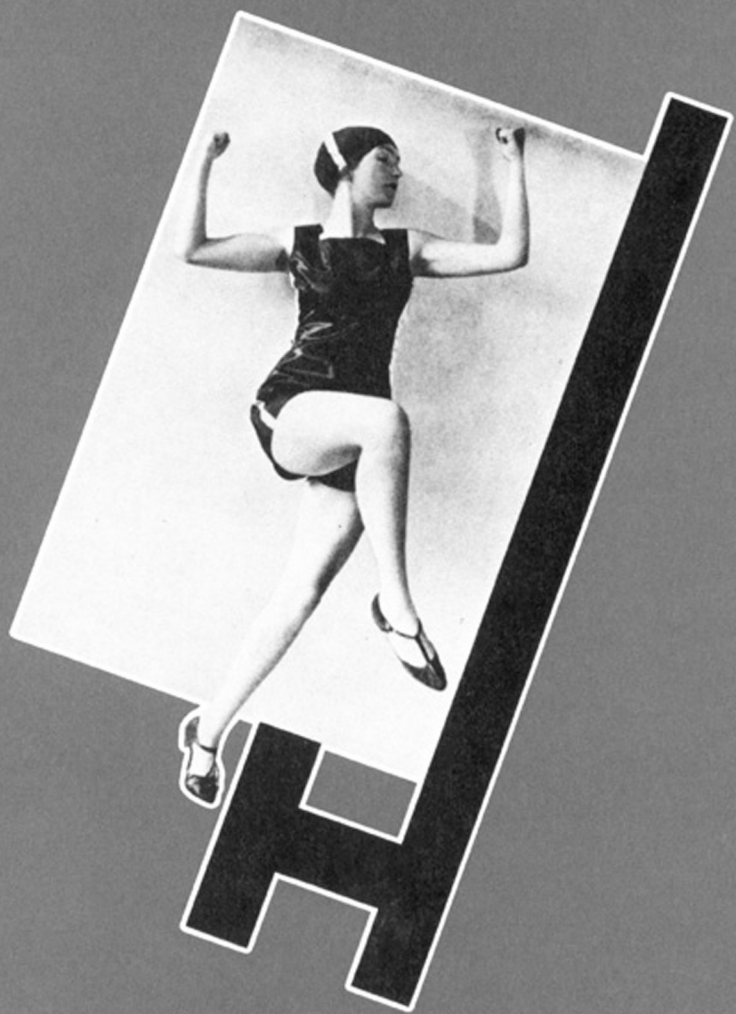


Fontanus

vol. IV 1991

from
the collections of
McGill University



Cover Illustration: The letter "H" from Vítězslav Nezval, *A.B.C.*, Prague, 1926, designed by the Czech modernist Karel Teige. (Department of Rare Books and Special Collections, McGill University Libraries.)

Fontanus

from
the collections of
McGill University
volume IV 1991

5

Dedication to Dr. Samuel O. Freedman
Eric Ormsby

7

Greenland Adventure: 1935
M. J. Dunbar

35

A Collection of Qur'anic Codices
Adam Gacek

55

Venice and Crete: Documents from the XVIth to XVIIIth Centuries
Dionysios Hatzopoulos

69

**My Dear Eve..., The Letters of Ernest Rutherford to Arthur Eve,
Part III, 1912-1914**
Montague Cohen

109

**The McGill University Collection of Greek and Roman Coins:
New Evidence for its History**
Richard Virr, Barbara Lawson, G. Michael Woloch and Franziska E. Shlosser

125

Under the Banner of the Book: The Work of Karel Teige
Irena Žantovská Murray

143

**Human Rights Inside the United Nations: The Humphrey
Diaries, 1948-1959**

A. J. Hobbins

175

Notes and Comments

**Early Children's Books in the McGill University Libraries, *Marilyn Cohen
and Jacqueline Reid-Walsh***

A Portrait of Mary Todd Ferrier, *Conrad Graham*

Recent Additions to the David Hume Collection, *Bruce Whiteman*

Moshe Safdie's Archive, *Irena Murray*

185

Chronicle

195

Contributors

Editor:

Hans Möller

Associate Editor:

Richard Virr

Editorial Committee:

Peter Daly
John Hobbins
Pamela Miller
Hans Möller
Eric Ormsby
Richard Virr
Kate Williams

Management Committee:

S. O. Freedman (Chairman)
Philip J. Cercone
Gretta Chambers
Richard L. Cruess
Peter Daly
Max Dunbar
Calvin Evans
Margaret Gillett
Carman Miller
Hans Möller
Eric Ormsby
R. K. Prichard
Pamela D. Stewart
Bruce Trigger
Charles Wilson
Ruth Wisse

Proofreading:

Bernard Dufresne
Frances Kelley
Raynald Lepage

Word Processing:

Elizabeth Thomson

Cover Design:

Instructional Communications Centre, McGill

Printing:

Les Éditions Marquis Ltée.

Paper:

∞ (acid-free) Finch opaque
cream white, vellum finish 70 lb.

Subscription prices 1991:

Institutions: \$30
Individuals: \$20

© McGill University Libraries 1991

ISSN 0838-2026



Dedication to Dr. Samuel O. Freedman

This, the fourth volume of *Fontanus*, is dedicated in honour of Dr. Samuel O. Freedman, Vice-Principal (Academic), McGill University, for the past ten years.

It is especially appropriate to dedicate this volume to Dr. Freedman, for no Academic Vice-Principal in memory has devoted so much generous attention to the betterment of our libraries. Dr. Freedman leaves our libraries in a far superior condition to what he encountered ten years ago. All of us owe him a sincere debt of appreciation.

It is hardly possible in a brief preface to enumerate all the manifold ways in which Dr. Freedman has sought to improve library services and collections, but I wish to emphasize a few of the most significant. Thanks to Dr. Freedman's farsightedness the McGill University Libraries now offer a highly sophisticated and virtually complete automation of services. Automated circulation is the most conspicuous of these services, but perhaps even more significant and enduring is the creation of the automated catalogue itself, McGill's MUSE database. This database, now comprising well over a million separate records and accessible not only by author and title but by subject, keyword, and Boolean search, has been a major achievement. Dr. Freedman deserves much of the credit for this, since he saw from the inception of automation that the conversion of catalogue records from written cards to electronic format—the "Recon" project—had to occur simultaneously with the installation of the Notis system. As a result, while Notis was being implemented, many thousands of records were also being converted; this was a courageous decision for it meant a certain delay in the provision of very visible public services (such as circulation) in favour of the superior on-line catalogue, which we now enjoy.

The automation of our libraries was but one of a number of projects and concerns which Dr. Freedman has overseen during his tenure as Academic Vice-Principal. His deep and abiding commitment to the library's collections, weakened by inflation and reduced budgets, has been crucial. Thanks to Dr. Freedman's efforts, a substantial portion of monies raised during the last McGill Advancement Program was set aside for both retrospective and current acquisitions. These funds, and most particularly the rattrapage funds, have made an enormous difference, permitting the Library to undo some of the damage of the last 15 years.

Dr. Freedman's dedication to the highest standards of research and scholarship has had a huge impact, not only in faculties but in the libraries as well. He has championed the right of professional librarians to be full academic staff members and has steadfastly encouraged research projects and sabbatic leaves by librarians. In so doing, he has made the McGill University Library a challenging and inspiring place in which to work. All of us, librarians and library assistants, are sincerely grateful for his constant interest and encouragement.

It is, of course, especially fitting in this light to offer the present volume of *Fontanus* in Dr. Freedman's honour, for he has from the beginning supported the creation of a journal of scholarly research based on McGill collections. As chairman of the *Fontanus* Management Committee, Dr. Freedman has lent his insight and discernment to the continuance and development of this journal, devoted to the exploration of collections in libraries, archives and museums of McGill University.

Despite budgetary constraints and bureaucratic debacles, Dr. Freedman has been not merely a superb administrator but a genuine friend of libraries, learning, and scholarship. His leadership over the past decade has been an inspiration to all of us. While we wish him every success in his new position as Professor of Medicine and Director of Research at the Sir Mortimer B. Davis Jewish General Hospital, we would like this fourth volume of *Fontanus* to serve as a visible and lasting acknowledgement of the appreciation and friendship which Dr. Freedman has inspired during his tenure as Academic Vice-Principal.

Dr. Eric Ormsby
Director of Libraries

Greenland Adventure: 1935

Diary of a very young man, age 20

by M. J. Dunbar

This is the diary, unedited and in its original form, of one member of a four-man student expedition to Greenland. All the members were approximately the same age, all Oxford undergraduates, and the purpose of the enterprise was the survey of an area in West Greenland south of Holsteinsborg. Two of us, Henry Hayward and Peter Mott, were engineering students and had some considerable knowledge of surveying. The other two, Michael Atter and myself, were officially "back-packers," or general support. Mike Atter was drowned in the Sarfartok River, a large, swift and muddy river draining the ice-cap. It is mainly in his memory that this diary is published; but it is also offered as a personal statement by a very young man, member of an expedition that made no claim to immortality in the annals of exploration.

Il s'agit du journal intime, inédit et dans sa version originale, de l'un des membres d'une expédition de quatre étudiants au Groenland. Tous avaient à peu près le même âge, tous étaient des étudiants de 1^{er} cycle d'Oxford et avaient pour mission d'arpenter une région située dans l'ouest du Groenland et au sud de Holsteinborg. Deux d'entre nous, Henry Hayward et Peter Mott, étaient étudiants en génie et avaient une connaissance approfondie de l'arpentage. Michael Atter et moi-même étions leurs "aides". Mike Atter s'est noyé dans la Sarfartok, rivière large, tumultueuse et boueuse drainant la calotte glaciaire. C'est essentiellement à sa mémoire que ce journal est publié; publication offerte comme le témoignage personnel d'un très jeune homme, membre d'une expédition qui n'a jamais prétendu à l'immortalité dans les annales de l'exploration.

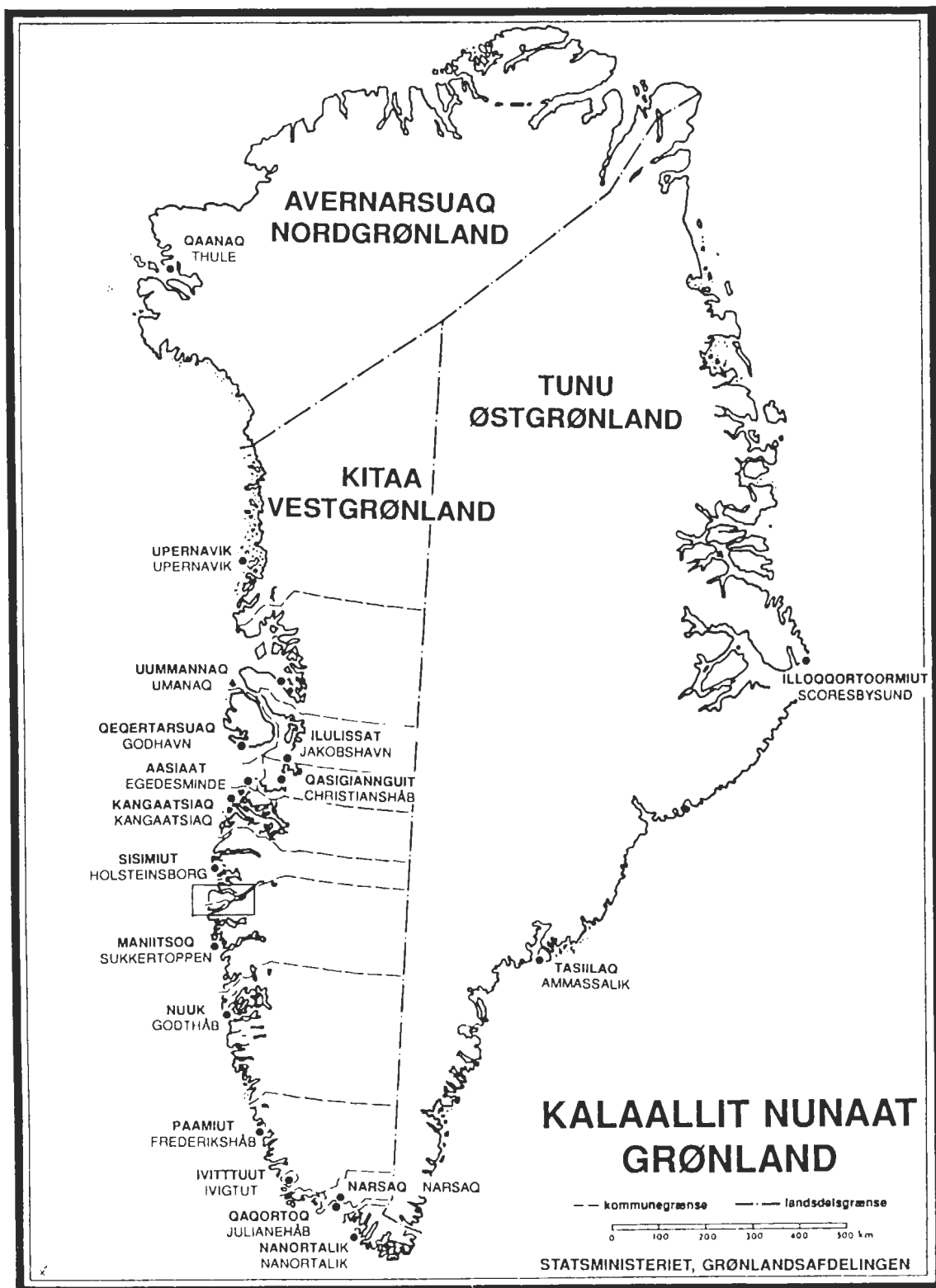
PREFACE

During the late summer of 1990, Max Dunbar visited me in Greenland, his first visit to this land in almost fifty years. This was an exceptional pleasure to me and together we travelled in the region of Godthåb (Nuuk), flew through the Sarfartok¹ Valley near Søndre Strømfjord and went by boat and helicopter around icebergs in Disko Bay and deep along the Jacobshavn Icefjord to the Inland Ice. Everyone who met Max Dunbar here was, as I, taken by his ever compelling interest in and sensitivity to every detail of life and nature in this Arctic region.

As a very young man and a student at Oxford University, Max joined the 1935 Oxford expedition to Greenland². The following text is his diary from that time, a very personal and lively record including his thoughts and ideas about life and many keen observations about the fine shades of human nature, animals, birds, mountains, sea, fog, light and dark, observations as subtle and captivating as could only be recorded by a person possessing a genuine love of life.

One could expect a scientist's diary to contain a string of dry notes and minute observations. This author is different. Max Dunbar is not only one of the leading scientists of our time but also a philosopher, a humanist and an artist. He lived in Greenland from 1941-46 performing the duties of Canadian Consul to Greenland and at the same time conducting research in oceanography and marine biology, disciplines which later gave him world renown.

Godthåb–Nuuk, April 1991
Svend-Erik Danielsen
Managing Director
The Bank of Greenland



GRØNLAND: LANDSDELE OG KOMMUNER

July 8. Dannebrog.

Sailed yesterday morning at 9. Saturday (the 8th) we spent in Copenhagen. On Saturday night, after seeing "M" at a cinema, we went on to the National Scala, to investigate Copenhagen night-life. The Scala bar was excellent, except for the pianist who played foul contaminous music and sang similar songs. He took half a second to reach each note, starting a third or so below. There was a Viennese ballet in another room, which was really worth watching. The girls were beautiful, and the men passable. They danced to Liszt's Second Hungarian Rhapsody, the Blue Danube, and something else that I can't remember. We crawled aboard at 1.30 a.m., after the taximan had taken us round the town in a gallant effort to find the right dock.

We are now 26 hours out, and doing about 6 or 7 knots. The contrast between the Viennese ballet and our present surroundings is impressive. It is for me the highest price to pay for this trip that we are for the next three months cut off from music and feminine company. The touch of a piano would be very welcome even now, only one day out, and the thought of someone in Colonsay has a sting to it. One can imagine oneself as a small piece of steel pulled in vacillating directions by magnets that are the things in life that we love. I suppose it is best to let each magnet have its pull. It is in fact the only way to live, for Greenland, a Bechstein piano, and the aforementioned company which we will call "Lisadel," are for the moment obviously incompatible. There are other magnets in the offing as well.

But there is one very happy thing in this connection which has occurred to me; the essence of every pursuit which is worth doing is identical. Whether one is writing or playing music, finding pleasure in riding a horse, in climbing mountains, in sailing boats, or in distant journeying, the ultimate goal seems to me to be the same in each case, and to be closely bound to, if not identical with, the purpose of life itself. To be able to head for this goal in the company of Lisadel, and with her help, is the nearest that man can get to heaven on earth. Whether or not this is an argument for

the retention of the institution of marriage I am not sure! I have as yet little idea of what "the goal" or "the purpose" are.

Besides ourselves, there are three other passengers—one named Holtved and his wife, and a youth of seventeen whose name Holtved told me, but which I didn't absorb.³ Holtved, whom I have christened "the Professor," is going on archaeological work near Thule. He has been out several times and knows Greenland fairly well, but I think this is the first time his wife has gone with him.

The captain is large and quiet, and doesn't talk much else but Danish. There are about 5 or 6 in the crew, including a cook and a youth with a scarlet cap (with thanks to Calverley)⁴ who produces our meals. The ship's dog, a small terrier with warts, completes the personnel.

To the spirit eternal of life
To the keeper of this world's end
I, an unbeliever
This token of thanks do send.

(etc.??) On the bowsprit, evening.

July 11.

We should reach the Orkneys sometime tonight. The sea at the moment is like the millpond of legendry. We had a discussion today on greatness and progress. The opinions of the lay mind on scientific progress are as good entertainment as George Robey.⁵ Their ideas of science go no further than wireless and explosives, with a little medicine thrown in. It's the fox and the stork.

Evening. Fair Isle in sight, also part of the Shetlands. The sea is like a gently undulating skating rink.

July 12.

Big doings in Derry. I wouldn't mind being at the Dogleap⁶ now. The sea is no longer like an ice-rink, undulating or not.

July 18, Thursday.

Notice the gap since the 12th. These last six days have been utterly disgusting. We met a westerly storm. We were below practically the whole time in that filthy atmosphere of the



Figure 1. Copenhagen dock: Left to right—Henry Hayward, Michael Atter, Peter Mott, Max Dunbar.

cabin, feeling like death. I was only actually sick once, but the constant knocking about by the ship's wild dancing was weakening, physically and morally. I kept thinking of all the lovely things I might be doing in Ireland, or at home in Edinburgh. They consisted chiefly of eating plain food. I thought of brown-bread-and-honey teas, of apples, bananas, Brussel sprouts and chocolate. Every three hours the cook or his boy or both would come down in a hopeful sort of way and lay things for meals. The Professor ate solidly through the whole purgatory. The cook's pipe and cigars were another major discomfort. I have never smelt such vile tobacco.

Today is fine. The breeze is chilly, but out of it, it is warm. The sea is gradually losing some of the wicked looking mountains that it has shown for the last few days. During the whole storm we went north some miles, and forward almost none. Apparently the trip from Fair Isle to Ivigtut takes ten days in good weather. We left Fair Isle at midnight on the 11th. We should be in Ivigtut about Friday or Saturday of next week, barring more storms, which God forbid.

Talking with Mike last night about little churches and pubs in the Cotswolds⁷ made me feel quite homesick, which is saying a lot for the Cotswolds. After one's recent treatment one is a fertile soil for such nostalgic sowings. The thought of Limavady⁸ made me wild.

July 19.

Made about 50 miles in the night. Not excellent going, but road-hogging compared with our recent speeds. The sea is getting a little more like an ice rink, with a slow swell. But the boat, with all her canvas down, is rolling like hell, as if she was doing it on purpose. The weather is beautiful.

Reading "The Evidence of our Senses."⁹ A remark quoted of A. S. Eddington rather worried me: "We have found that where science has progressed the farthest, the mind has but regained from nature that which the mind has put into nature. From "Space, Time, and Gravitation," Cambridge 1921. This needs further investigation.

Washing just now is reduced to a minimum. My teeth are the only things that benefit in my system; so that we are now thoroughly greasy, whiskery and tousled, but getting sun-touched and happy. It reminds me vaguely of Ballymaglin.¹⁰ And while thinking of Ballymaglin, those grand little pears will be ripening in a month or so, and the mountain must be lookin' well. I wonder if Aunt Nan is making any more Elderberry dye? The Roe,¹¹ I am afraid, will probably be a little low, but I could get trout out of it all the same. And the Dogleap—porridge and cream, and gooseberries in the garden soon. I wonder who Aunt Dorothy is going to have there this summer. I have just remembered that I am scheduled to appear at Marble Hill in August. Something tells me I won't be diving into Harry's Hole¹² this year.

Wednesday, July 24.

The weather turned cold again soon after the last entry. We had a "party" in our dining hall four nights ago. It began with hot rum punch and continued until about midnight on beer. The mate was very drunk and rather objectionable. None of us felt too well the next day. I hope to heaven we don't have another one; the cabins were almost unfit for a badger to sleep in.

The food on this ship is wretched. If it was really good, and British (!) I would be eating heartily, having got entirely used to the motion of the ship. As it is, yesterday's lunch came up immediately afterwards. It is the mixture of curious food and awful smells that destroys one's appetite. The table-cloth began to smell so filthily yesterday that we had to demand to get a clean one at once. We got it.

The cabin boy came down in excitement last night and reported that a whale had just passed. He said someone had photographed it. I wish I had seen it.

We should pass under Cape Farewell tomorrow some time, or perhaps the next day. We have to give it a very wide berth, because the ice gets packed around it, so we shall not be able to see land for some time. We should make Ivigtut by Sunday. If we manage a month in the Strømfjord area, we shall be lucky.

So far, it has been an expensive trip. To pay so high for three weeks or more in this ship of smells—I think it goes by running way from its own smell—seems madness; I wonder why we do it. And three kroner a day for this food is wicked, even supposing we ate it.

The difference between the captain and the mate is that while the captain spits over the side of the ship, the mate spits on the bridge.

Friday, July 26.

Well west of Cape Farewell, but some way south. Stiff head wind last night. Today is nice. Clear and sunny, with a westish wind. The Professor was giving us advice about our tents this morning. He suggests putting on a strip of canvas round the bottom, to put stones on for wind. A good idea; we will probably do it in Holsteinsborg. It will, of course, add to the weight of the tents.

I spent two hours yesterday in happy recollection of a saucer-full of tinned apricots I had for lunch. This gives an idea of the kind of food we are putting inside us.

Saturday, July 27.

Going one point N of NW. Ought to be in Ivigtut Monday morning. The magnetic declination here is about 40° . On Strømfjord it will be nearer 52° . So that the compass just now is giving our course as due north. Today is cold, with no wind.

It is a good thought that we are going to the North Pole of the Winds; sort of watershed of the wind-system of the northern hemisphere. Small wonder we shall want those canvas skirtings round our tents!

Mike lent me a book yesterday from the Cambridge Miscellany; it was a small volume of the poetry of Charles Sorley.¹³ He was killed in the war at the age of 20. Some of it is good stuff. One particular couplet I remember:

“But I’ll put custom on the shelf
And let him find his God
himself..”

Talking about his future son, which he was not destined to have.

C minor nocture.

C minor statement → B flat major, with a simple tonic and dominant harmony over an octave or more in the treble → E flat major? → A flat major for the running bit, and then straight back to C minor. I’m glad Jean¹⁴ likes what there is of it.

Evening. Going about 7 or 8 knots. Flat calm. West wind. Going almost due north. All canvas set. Fine. Played “Hearts” till late, with the cook. The cook won. He has a most suggestive way of cutting the cards, but it may not mean anything. The opinions seem to point to arrival in Ivigtut to-morrow night.

Sunday, 20th.

The West is Awake. Came up on deck this morning in bright sunshine. Cape Desolation looking like the giant’s castle, and guarded by glistening icebergs. The sight is one to make the eyes water and imagination whirl. Through the glasses it looks like some fairyland of rock and ice. It is very cold.

Then came the mountains and the ice,

As though the mist, crystallized and cold from sleep

Had shed upon the day its gift of fairyland.

There’s a sonnet to be found round that some day. The whole three weeks of rather grim voyage has melted away as if they had never been. The coastline is a prize worth waiting for.

The inland ice is also in sight, just south of Cape Desolation. Its dead flat horizon disappears into the sky, and it can be seen stretching for miles inland.

My beard is progressing. I spent some time this morning dry-shaving it and clipping it and generally exploring the methods of trimming it. I am quite determined to keep it till I get home. I wish I could grow more just below the lower lip.

Midday. Almost round the Cape (Desolation). There was a belt of fog turned up about 11, but that has gone again and we are once more in the sun. What wind there is, and there is very little, is as cold as the ice it comes from, and it is really more comfortable



Figure 2. Mike Atter on board the schooner "Dannebrog."

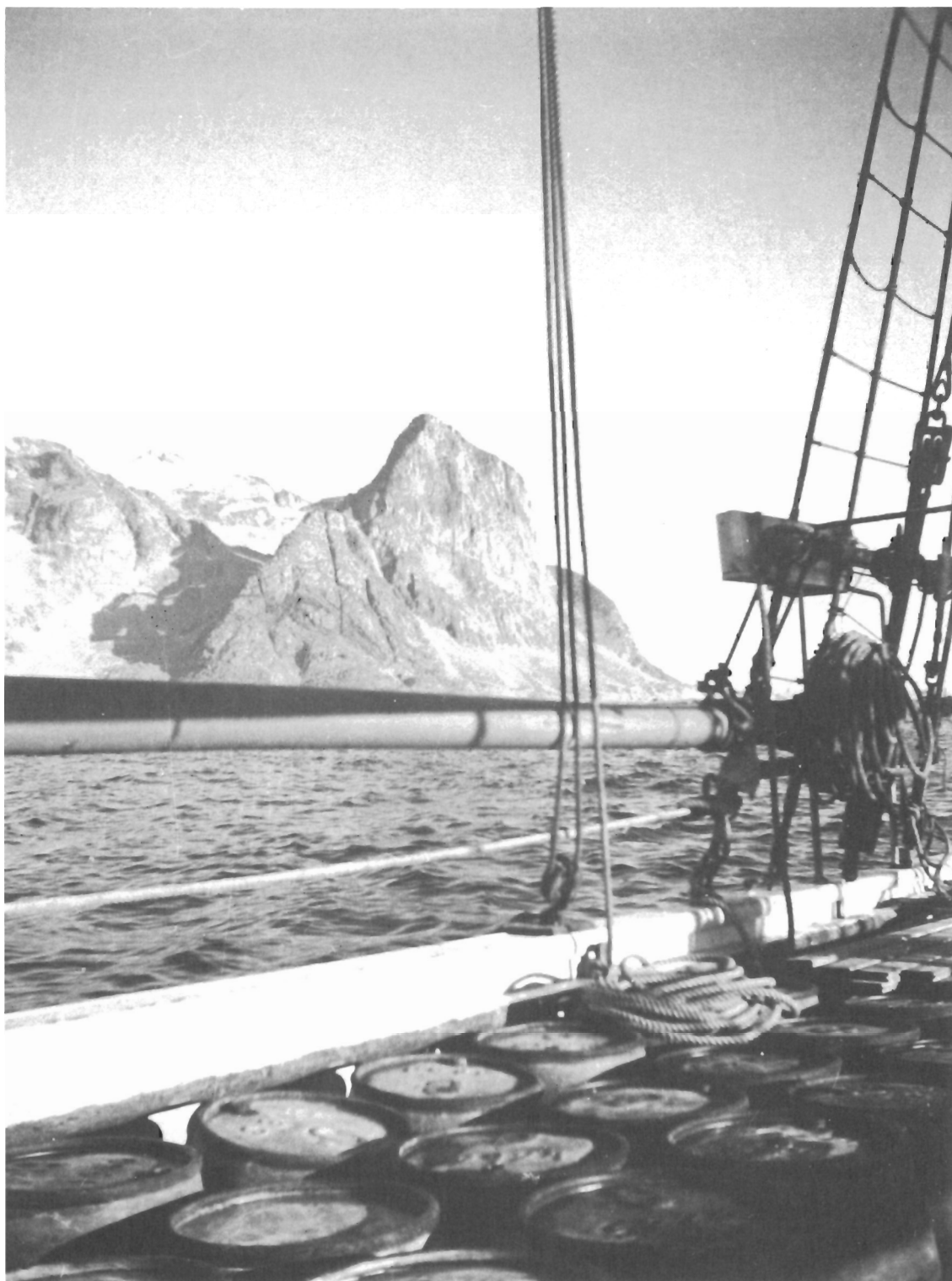


Figure 3. Cape Desolation, Southwest Greenland.

down here in the cabin, where we have the stove going again.

The usual lunch has just gone by. We are hoping for a large store in Ivigtut and in Holsteinsborg, where we can get such outrageous luxuries as chocolate, chewing-gum and biscuits.

8 o'clock. We have just come round the island opposite Ivigtut. We are now in a narrow strait between it and the mainland. It is lovely. Dead still water, dead still sky. The sun casting some of the mountains into light, others into shade; a few small icebergs. The colouring is magnificent. We passed one little headland all ragged and rocky like the Rosses, others like bits of Scotland. Most of it is like the tops of the Cairngorms brought down to sea level and magnified. The cameras have been busy. I endorse Mike's feeling that if we turned straight back home now, we would not feel cheated.

The only life in sight consists of birds and jelly-fish. There are some small, dark brown, almost black, birds with white patches on the wings and white under the wings. They fly quickly and are partridge-like in flight. [Guillemots]

I should love to come here with Peter¹⁵ and a small sailing dinghy. Hovering round this coast and exploring the fjords would be good. And these mountains would be good climbing.

Jean's¹⁶ lamb-lined gloves are a great blessing. I shall certainly pack them in my rucksack. They have been admired by the whole ship's company. And they remind me of her. I have written her; also Moira¹⁷ and Ronald; we hope there will be a boat from Ivigtut before the "Disko."

After midnight. Went ashore. Arrived Ivigtut 9.30 p.m. Ivigtut centres on a cryolite mine, and consists of a number of rather nice little houses of slate (red) or wood and scattered over a rocky slope surrounded by a semi-circle of hills. We discovered a mysterious pool of warm water, probably being the overflow from some plant or other. There is a steamer here, the "Elie," from Esbjerg, which will take our letters to Denmark. Further exploration in Ivigtut and surroundings

tomorrow. Mike and I want to go over the hills, but Henry wants me as interpreter (in German), to go to interview the Governor. But as the Governor seems to speak perfectly good English, I shall try to persuade him that my services will not be required.

Came back aboard and made chocolate of cocoa, sugar, and condensed milk—dry brewed,¹⁸ in fact! Then up to the galley to make toast. Helgi (one of the crew) Leif and Manne Rasmussen were there too, and supplied with chewing-gum, chocolate, bread and butter, we passed a replete hour and a half. The Rasmussen boy is the son of the famous explorer, the Warren Hastings or perhaps Captain John Smith of Greenland. We have just learned from Helgi and Leif that there is an epidemic, apparently of chicken-pox, in Holsteinsborg. This may seriously hold us up. I hope not. The Governor will be able to let us know tomorrow probably.

The night is still as Karl Böhm could have wished. There is a redness in the sky to the north. It is like a Chopinesque dream, though perhaps Grieg would feel more at home in these latitudes.

Wednesday, July 31.

Left Ivigtut at 11 a.m. Monday was a very full day. Henry and Peter went to see the Governor and arrange matters at Holsteinsborg. Mike and I went up into the hills. We didn't get far, partly because we were told we would sail at mid-day, but mostly because our training was foul. We could hardly move at first, but we got a little better later on. The flies—black flies—are very annoying, but the veil deals with them effectively. They don't worry one's hands so much. There were not many mosquitos about, but we are expecting more at Strømfjord. Vegetation: Blueberries, and another darker berry, with a lot of seeds, quite good to eat [crowberries, ed.]. Myrtle, and a kind of shrub willow. A little creeping spruce, or something of the sort, is found higher up. Coarse grass. Mosses of various sorts. No ferns.

This is the only cryolite mine in the world. MgAlF₂. I kept three specimens of it. They were loading up the "Elie" the whole time.

There were a number of snow buntings, lovely birds. The flowers were not in vast abundance, but there were some. A large purplish flower that I don't know (as I don't know most flowers), coltsfoot, a sort of double coltsfoot, and a few smaller flowers of Alpine aspect complete the list.

We ate our bread and sardines and rushed back to get to the boat in time, to find that no one had dreamt of sailing yet. I broke H.H. (Hans Huber, my Alpenstock) on the way. There was a cliff to climb down, so I chucked the staff to the bottom. When I went to retrieve it, the iron spike had come unstuck. Pity. In the afternoon Leif took Mike and me in a small boat he had the run of by some means or other, and we went along the shore a little, landed, and climbed another hill, higher than this morning's effort. Leif is worth his weight in gold. He can produce practically anything out of the cook, or the bowels of the ship, and is very willing to do anything for you.

Supper of fried hake at 6. Very good. Then a bath!!! What a bath. They have a sort of communal bath house above the workshops, and we emerged looking quite new. I made my beard look no end Byronic, or Browningsque. We donned our party clothes (a tie) and went ashore to the Mess, the place where all the engineers and their wives feed. There we sat down to a table laden with an overgrown hors d'oeuvres, beer, and Snaps. Curious meal, but very merry company. Followed by coffee, brandy and whisky in the lounge. By this time I was feeling pretty good, and in my newly-trimmed beard talked sparkling German to the ladies.

The doctor—Faderspøl—(I think)¹⁹ is new here, but seems to be pretty well known and liked already. He is a funny Teutonic-faced man and is usually laughing. Reminds me slightly of Dr. Reuter.²⁰ We showed him round our ship at midnight, and then returned to his room to play the piano and sing. It was good to get a piano again, though it was not in the best of tune.

Danish songs are rather angular and sudden. This is the one they sang most: (A flat major: "Slaa Rommen i Glasset.")

The next house of call gave us beer again, which was bad. We sang some more, danced and did various tricks—a little unsteadily. Holtved was there, and he was very drunk. I danced an impromptu Irish jig, a sword dance, and my exhibition of the Russian school. Peter and Mike did some gymnastic stunts which I couldn't face at that hour.

Wandered back aboard about 2 a.m., dawn just showing itself. My bunk was strewn with my possessions, so I slept across four chairs till 8 o'clock (Tuesday).

Feeling very shaky. Sailed 11. Was very painfully sick at 6, and got rid of a quantity of poison, I should think. Slept well, and today I am feeling myself again.

And this is exploration. Well, well. Some whales have been seen. They look like large porpoises in the water.

I gather it takes 4 days from Ivigtut to Holsteinsborg. That means landing on Saturday. Strømfjord, we hope, by Monday.

Evening. I have begun the downward path. I am learning bridge. So is Henry. But for this trip only; I shall forget it on landing in Leith, *ipso facto*. It takes far too much thinking. Just now I have cut out in favour of Leif. I think Henry wouldn't mind any if I cut in again on him (Henry).

Land in sight again. The coastline looked rather fine just a few minutes ago, with the evening sun on it.

Someone in Ivigtut made the remark that he expected war in Europe within six months. I don't know why this remark should worry me more than many similar ones I have heard at home, but it did. I am not quite certain what my reactions would be if war came again. I think I should be so despairing of the quantity of common sense in the world that I would just not worry about life any more. War is such a shockingly impersonal affair that I cannot imagine any person feeling obliged to fight. He would, it seems to me, be so certain that if he had a say in the matter war would not have occurred, that he would feel bullied and shanghaied if asked to fight. The only thing that would persuade me to fight would be the arrival of an aggressive nation



Figure 4. Kuunaat Mountain, near Ivigtut, Southwest Greenland.

saying "We want all your colonies and all your possessions." It seems to me that several nations would be quite justified in asking politely for a share in some of the British colonies, particularly those with vast areas of uninhabited land. In the days of smash and grab we grabbed far too much.

The world would feel safer if it was certain that its diplomatic and political affairs were in the hands of its most enlightened citizens. Meanwhile I know that thought and art are the most important things in life, taken in their most wide sense, and that "the Preachers" are the men to follow. But how to convince others?

Thursday, August 1.

Opposite Godthaab. Began setting "When I was one and twenty" by Housman to music, recited to us by Henry. The coastline is still finer now, and the mountains higher. Henry was rather worrying today with his expounding of what he calls his "drill" on arrival at Holsteinsborg, and Strømfjord. I forgot to laugh (to myself). Mike said at Ivigtut that it was only by laughing to himself that he could stand Henry's goat-like efficiency. He is rather like an old duck and keeps on quacking periodically. But I certainly admire his enterprise in doing this trip, having done no climbing or camping whatever before.

Old Holtved is rather impressed with our appetites at this stage of the trip. He was quite flabbergasted when we passed around hot-buttered toast immediately after supper tonight. We made it at the stove. I think his opinion of the capacity of Britishers is going up. Anyway he and the Captain and Fru Holtved were too surprised to accept any toast, which was all to the good.

Peter has been having great difficulty with his insides lately. They just refuse to work. The scientific packing with dynamite that we have been putting him through is the cause of much amusement in the camp. He produced a little "Vegetable Laxative" labelled "1 to 3 at bed-time as ordered by the physician," so the physician (myself) promptly ordered the full dose. As he has already absorbed two spoonfuls of Castor Oil, he has no excuse. Calomel comes next on the list.

Friday, August 2:

Very little progress in the night. We met head winds, and today we are sailing along westwards instead of northwards. Just now (lunch-time) we are within 200 miles of Canada and heading straight for it. We are rolling fairly heavily and it is very cold on deck.

Saturday, August 3:

Mike's twenty-first birthday. Twenty-one on Davis Strait. It may be possible to celebrate this evening in Holsteinsborg. We should get there about 4 or 5 this afternoon. The wind is much less today, but it is still cold. I think the slightest breath of wind on this sea makes it very cold. If, by chance, we don't arrive in Holsteinsborg till tomorrow, it is likely we shan't get our stuff unloaded before Monday, as the crew have a holiday on Sunday in port.

Sunday, August 4:

Arrived in Holsteinsborg last night at 8.30 or so. The mate started unloading at once for us, so I was up on deck checking boxes with Henry. The A and N [Army and Navy Stores, ed.] have been rather difficult in their numbering, and we had to have four counts (one by each of us) before we were satisfied we had everything. The Greenlanders came out in flocks of rowing boats, and grinned amiably while we bustled with activity. They were very helpful, and behaved like kids with our rucksacks, dancing about on the lighter with them on their backs. The stuff was stowed aboard the "Nakuak" at once, by the good offices of the Governor, Mr. Rasmussen (no relation), who invited us to coffee afterwards. His wife makes the most marvellous cocoon cakes; I am afraid I let myself go over them, but I expressed my appreciation of them. She also played some early Tauber²¹ records, which were good; he sung the Lieder as Lieder, and not to show off himself. I must remember to look out Schubert's "Nicht Klagen" (Kam der Tag).

We are invited to lunch today with the Governor and his wife at 12.30.

Last night we slept on shore, in a sort of wooden hotel with nobody in it but ourselves. I tried to sleep for half an hour, but couldn't,

Greenland Adventure: 1935

so I got up and dressed very quietly (Mike never stirred) took my camera and investigated the surroundings. In the town, while taking a photo of a Husky pup, I heard a voice behind me say "English;" there were four people behind, all Greenlanders. One of them, a small boy, came forward and pointed at the camera, so I took his photo, to the general delight. He then squeaked something which I told him firmly I couldn't understand. I think he expected the picture to appear at once for him.

The view inland was good. I spent 4 or 5 exposures experimenting on sunlit clouds, then watched the sun come up. It was a fine sight. The highest wraiths of cloud turned golden at first. Then the colour came down through the clouds till it lit the peaks of rock, and finally the sun lit me.

Slowly came the dawnsings
For it's light the whole night
through;
But at 3 o'clock o'mornings
There's a kindle in the highest sky
And
Glitters suddenly in song

The Governor opened the store for us. Three of us got weatherproof "jerkens." I bought a spare pipe, probably American. And we got the canvas for the tent skirtings. Each of us has a different theory of the interaction of tent and wind and its circumvention, but Rasmussen says the wind in the Strømfjord area is not great.

We are to be picked up again by the "Nakuak" on the 31st of August. Not much time. Henry is probably staying on. Big money speculations this morning.

Monday, August 5:

We saw off the "Dannebrog" yesterday from Holsteinsborg, 7 a.m. They gave us breakfast on board. Henry and Peter and I went down to a group of men working on a drain (at 5 a.m.) mentioned "Dannebrog," and immediately two of them shot off for a boat, rowed us to the "Nakuak" for our washing things and the whisky for the mate, and on to the "Dannebrog." We gave them some cigarettes, and away they went happy.

Many farewells. We went back to shore with the Greenlander watchman, whom we christened "Whiskers" (we have a photo of him) and watched the "Dannebrog" sail away. She looks splendid when one is outside of her.

We stopped on the way here (Strømfjord) to have coffee with one of the Geodetic Institute lads surveying the coast. He has a very nice little ship, Kelvin-motored. He dipped the flag for us when we left.

Now we are chugging up Strømfjord. Just breakfasted on porridge (good, but we didn't make enough), biscuits, butter and cheese, capped by a little tea. The biscuits we pack are wonderful. All wholemeal—digestive, wheat-meal, oaten. The sides of the fjord are all rock. We have seen the ice-cap in several places. There are deep, dark seams showing horizontally in the lighter "ground" rock. I wish I knew more about geology and petrology.

Mike and Henry are landing soon at Sarfartok ("the Place of Much Current") to prospect for a base-camp. Peter and I are bound for Hobbs' \$1000 dump-heap,²² returning probably tomorrow. Then the "Nakuak" leaves us.

Evening. Landed Mike and Henry at Sarfartok, 1 o'clock. There was no book of words packed with the Klepper,²³ and we left them struggling with a forest of struts and stays. Went on to the top of the fjord in the "Nakuak." Landed at 9.30 at Camp Lloyd. Went straight to Camp Evans, 3 miles due east. Here we found the shed locked securely, though Rasmussen had said it and Camp Lloyd were open. The lock fixings were so rusty that we had to break open the door. The first door I have ever broken open. It was closely followed by an inner door which went the same way; but it was much stronger, and I almost concussed myself charging through it. We ransacked the place. It was full of lovely things. There was a beautiful .39 Winchester Repeater; it was hard to have to leave it behind. We found one of his (Hobbs') precious radiotrons, though what use it will be to him, God knows. It is at least six years old and must be hopelessly out of date.

The walls were hung with pictures of "Miss Atlantic City" and similar stimulants. I shall

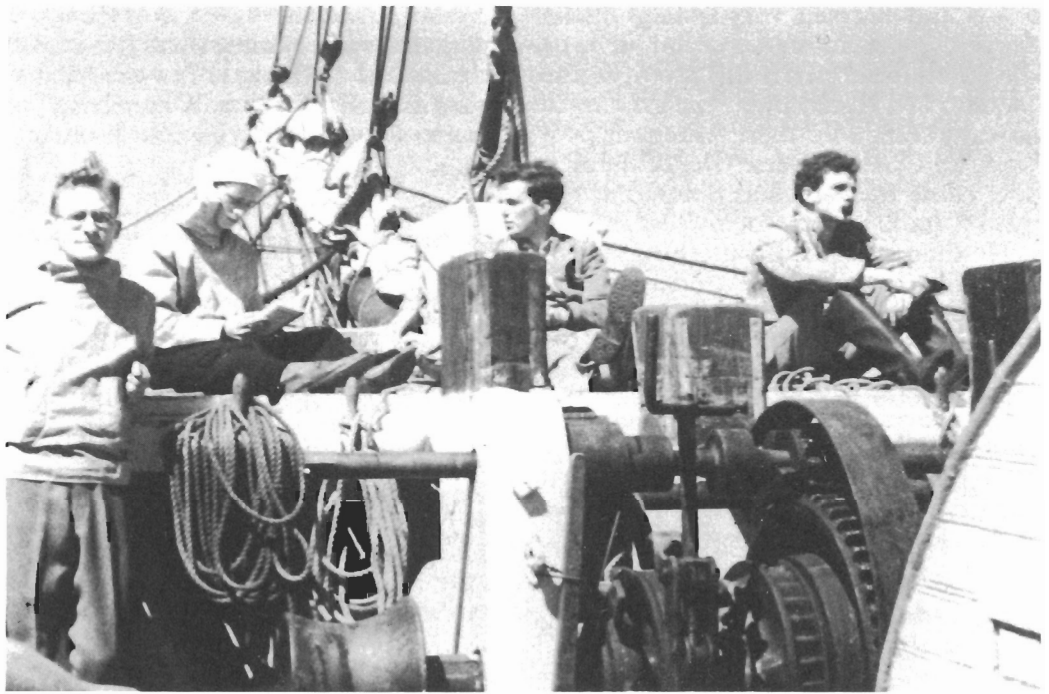


Figure 5. "Dannebrog": Left to right: Professor Holtved, Manne Rasmussen, Mike Atter, Max Dunbar.



Figure 6. Henry and Peter at the survey job.

Greenland Adventure: 1935

see that they are sent back to him. Found a toy trumpet.

Back at Camp Lloyd. Peter was very tired by this time (1.30, Tuesday 7th). We had got into the Greenlanders' skulls that they were to come for us in three hours from 9.30. We were an hour overdue. We yelled to the "Nakuak" anchored about a mile along the coast. Not a sign of life aboard. Peter went to sleep under a caribou skin. Went along the coast. Yelled for two hours intermittently "Ahoy Nakuak." Lit a fire to amuse myself. Greenlanders all sleeping like cats, casual blighters. Arrived for us at 9 a.m., grinning. Woke Peter. Sarfartok → landing stores → shallow water. Klepper and no sleep. Up river with Henry in Klepper, found site for base camp on the other side.

Base Camp pitched (I forget the day and date). This is now August 13th and a Tuesday, if my reckoning is correct. Base camp has been here about 4 days now. Henry and I reconnoitred a Klepper route for depot-laying inland. He and I went up to Heel Plateau (so-called because all our heels were hurting). Three days ago we started from our little camp up the river at 6 o'clock (up at 4.30 a.m.). Three and three-quarter hours up (3500 ft from sea level climb), and ten and a quarter hours working on a base line at the top, and two hours down to our camp again. Here we opened our first tin of pemmican. We parked "Theo" (our theodelite) and instruments, etc., there, and went on light to the base camp. Arrived midnight. 17.5 hours up and going most of the time, was just enough. We were greeted with sighs of relief by Mike and Peter, and a magnificent hoosh.²⁴

Today (13th): Blood sports—Mike—rifle. Depot laying by the other three. I went up to Teddy Tarn, packed up Pemmican Camp and dumped the stuff opposite the waterfall, where it is to be picked up (they are camping there tonight and tomorrow night). I began investigating the population of Teddy Tarn. Sleeping base camp, alone, taking rations to the others tomorrow, and going on with the tarn. Results published later, no doubt. My heel is sore, and there is an inkling of that damned big toe trouble again. Going over the scree²⁵ to the tarn is rather uncomfortable.

There is the hell of a lot of scree around here, avalanche and moraine.

Wednesday 14th August.

Last night was beautiful, and today there is not a cloud in the sky. I am writing this beside Teddy Tarn, the inhabitants of which are probably and justifiably feeling a trifle neglected.

I enjoyed being alone in Greenland last night. I would like to camp here for weeks. This morning I brought some food to the river for the others and dumped it beside Theo, etc., which had not yet been picked up. The others were on the other side. Henry and Mike came across in the klepper. I saw Peter moving off with a carrier (Everest carrier) in the direction of the food dump, looking as if he had done enough back-packing for a long time.

The plan is now: Mike, Henry and Peter are to fetch the ration cases from below which they hadn't time to fetch yesterday. That will mean 6 cases at the waterfall. I am to stay here for the afternoon, to collect water animals. At 6, Mike is coming here, and he and I will go back to the base, to return tomorrow with pemmican, chocolate, some rations, instruments, and my own kit. We then klepper food up as far as we can towards "The Island,"²⁶ camp there tomorrow night, and return the day after for more. Meanwhile Henry and Peter are going to go up to Snow Peak and survey. So far, so good. There is so much to do that days keep getting slipped here and there, and original plans have had to be modified.

Coming across that damned scree this morning I started a young avalanche going. My heel didn't benefit by it, but I think it is going to be all right. This tarn is in the middle of a sort of "unfinished landscape" of moraine and general "slag-heaps." One side of the moraine is quite like the arid desert of Asia. See photograph, provided it comes out.

Mended my rucksack last night at the base. Why the devil can't British manufacturers copy the Bergen decently? The workmanship is wretched. Anything that can come adrift, comes.

Greenland Adventure: 1935

Thursday, 15th.

Mike and I are now in camp on the sand beside the only stream we could find. We snugged down the Base Camp this morning, packed very heavy packs full of pemmican and chocolate and rations to the waterfall. Two hours or more going. And it was warm work. That scree for the last time for 10 days at least, thank heaven. We kleppered five ration cases and our rucksacks, paraffin²⁷ and rifle one and a half hours worth up the river this evening. We ought therefore to dump 10 days' rations, and a large quantity of pemmican and chocolate at the Island tomorrow. Henry and Peter are to meet us there at 8 p.m.

It is going to be a push to make the lake²⁸ in the time we have, but it would be good to do it. Henry, of course, considers it no use unless he can actually survey it. Personally, I think just to reach it would be fine. But I am no surveyor. Mike agrees with me.

I am very glad it is Mike who is the other non-surveyor. He is the only one who is what some people call "sympatisch." He is interested in many things, and with him it is possible to talk and think at the same time. Henry talks of nothing but surveying or plans; "shop," in fact. Peter²⁹ is charming but I am not sure how much he is enjoying himself. To be working inland into entirely unknown country like this is a thrilling thing to be doing. If we could live on the country it would be better still, but the only possible food available is hare and ptarmigan. We hope to get some soon. Also small berries of unknown name. The only signs of fish so far seen have not been encouraging, and we are not packing fishing tackle, to save weight.

I like thinking of all the things that are likely to be happening in the places I know while we here are completely cut off from them. The Dogleap will probably be having sunny weather. Moira is there and probably Bep,³⁰ in her dairy-coat. Everything going on so beautifully poetically and in such a business like way. ... The river will be low, and Bob Holmes working miracles. There will be bathing and picnic parties, at which C... Thompson will be talking as loudly as ever, and Eila³¹ as quietly. And everyone laughing.

The best place on earth. At Dunfanaghy³² it will be as boisterous and free as ever, though one of the party will never be there again. I wonder whether Mr. and Mrs. Cochrane are really over the worst. Perhaps they aren't there just now.

Where Henry (Havergal)³³ is, God knows. In Scotland probably, fishing. Tight lines to him. And here, this night that never comes, and a silence so vast that it hums.

Friday, 16th, 2.45 p.m.

At mid-day today we upset the Klepper. Every damn thing was soaked and I was above my waist rescuing the boat. I didn't have to swim. Nothing is lost. All our garments are gradually drying. It is an ideal day for drying things. "It might ha' been verra much worse." The only trouble is that Henry and Peter will not find us at the Island tonight, supposing they are on time themselves, which is doubtful. I think they have enough food with them. It is really rather funny. We have saved the precious matches, and the rifle is now none the worse for its swim. The adventure will probably put us back a day. The Island certainly looks a long way away still.

Saturday 17th.

MIKE WAS DROWNED TODAY. I shall have, I suppose, to make a complete statement of what happened later on. Here, suffice it to say that he died by jumping in after a tin of paraffin. I spent a ghastly hour and a half looking for him and then went to find the other two. We can do nothing about getting the news through so we are for the moment forgetting about it, beyond searching heavily. I stuck his ice-axe in at the place he leapt in, with this epitaph:

"It was too beautiful a day
for him to die;
He did so love the light,
so love the wind,
so love the rocky sunniness."

More of this later probably. At the moment I have much to adjust.

Sunday, 18th.

I find that after yesterday I have contracted a physical lethargy, though not a great one,

and a desire for intense mental effort. I would like books on such subjects as scientific philosophy, music, or even algebra. It is the best way of making the picture of yesterday become "ground" and not "figure," which is the first step towards pushing it into the background. Have been in camp all day, since crossing the river to join Peter and Henry. They have been out searching for Mike and getting food. They want to go on surveying for a few days, before making for the base camp. Myself, the sooner I see the base camp the happier I will be. I have the Browning here to read.

One of the first thoughts that came to me yesterday was of Mike's Anne Morrison, and the next was of Jean, and the thought of Jinny was like the opening of a door.

Monday 19th.

9.30 a.m. just woke up! This is to be a slack day in camp. I changed the site yesterday to a nice little hollow, more sheltered than the last site. We had a fire last night, told stories and sang songs around it.

Tuesday 20th.

Noon. Starting shortly for the Island! Crossing the river, picking up some food, and camping two nights at the bottom of the hill. This is probably our last mountain before going back to base camp, via the waterfall camp. It has not been easy to carry on, and I shall be glad to see the base again.

... 1.15 p.m. Henry, who had the coliwobles this morning, was sick and didn't recover in time; we are here for another day. Henry is lying in his tent.

These slack days are just the thing for us in the circumstances. It gives one time to think of pleasant things.

4.15. Have just been around the next two bluffs towards the Island with Peter. Hoped to see my pair of hawks, but saw no sign of them. I think they look like Peregrines, but I am not sure. So far as I remember, Longstaff's expedition³⁴ recorded no hawks in this area. I have recovered a bit now, sufficiently to think of "something lost behind the ranges" again.

Had some target practice with Peter. The target was a piece of toilet paper tied to a stone. I smashed the first stone; the second time we used so large a rock that a howitzer wouldn't have scratched it. Good shooting. The range was 40 yards. Henry is a little better. He has somehow managed to get a "chill." He says he may be able to manage some Julienne soup for supper. There must be something wrong when Henry is off his eats. Wednesday, 21st.

Henry has recovered. We left camp at 12.25, crossed the river, collected food, and made for the Island. Peter's performance in fording Clearwater River, or the Cherwell,³⁵ as it was afterwards called, was very good entertainment. His language on reaching the other side raised the temperature of the surroundings considerably. He would insist on going a way of his own, knowing, I am afraid, just damn all about rivers. There was the same kind of moss on some of the stones in the river bed as grows in the Roe in abundance. It was good to see it. It will never let you slip, no matter what you have on your feet.

Henry is tired now, after his bout of yesterday. Early start tomorrow, up the Island. Arrived here (Clearwater camp) 6.35. Now 9 o'clock, and sleep for me.

Thursday, 22nd.

9.15 p.m. Been up the Island. Pretty sticky climb up, but not too long. Lovely on top. Went away by myself while the other two started plane-tabling. Sunny. Came back. Henry and Peter weren't finished for 5 hours (4.30 p.m.) They are rather entertaining to listen to together. Henry: "The Admiralty Chart put this hill 10 miles from the fjord." Peter: "What, the Island?" "No, this one we're on." "Oh." They were on the Island! And so on.

Way down, (scree).³⁵ Camp-fire. Very fine hoosh. Getting windy; hope the tents stand up. Tomorrow we start back for the base. Snow on mountain tops. Clearwater Valley. Promised Land. Ravens; two caribous, remnants of; hoof.

Friday, 23rd.

Left Clearwater Camp. Crossed the river (Clearwater) at a different place, to please



Figure 7. Sarfartok River (Kugsuak), looking toward the Inland Ice.



Figure 8. Mike Atter's ice-axe, at the place he drowned.

Greenland Adventure: 1935

Peter. Made the crossing of the Sarfartok River at the spot below the scene of the accident for the last time, thank God. Now (8.45) in camp, about an hour from Snowy River. Tomorrow we fetch the stuff from Whitestones Camp, and the Klepper.

Thoughts on the march—overbearing men: Arctic hare, Cold; Beginning of way back. "Willie" stopped today; Peter forgot to wind him, (Chronometer).

Saturday, 24th.

9 a.m. Going back today for the kit and things at Whitestones camp. I am doing the Whitestones camp. It is getting colder now at nights, and there is usually a good deal of mist to clear away in the morning. Getting autumnal, in fact. I saw an eagle yesterday; looked quite like a golden eagle, but I didn't have the glasses with me. Perhaps I shall see him again.

7.15 p.m. Same camp as yesterday. Everything gone as planned. Tomorrow we sleep at "Snowy River" camp. I think tomorrow afternoon I shall do a little bird-watching. Henry and Peter are going up the side of the waterfall to do some plane-tabling.

There was an illuminating thing happened today. That dear old duck, Henry (I am not so sure about the "dear") is not a born leader. Leaders are never self-appointed. Peter is very fond indeed of cheese. We are running short of it here, and there was a tin at Whitestones. Peter begged me not to leave it behind, and Henry pooh-poohed it and quacked out a "list of things in order of importance," adding "bring the cheese if you have room." Actually the load I had was very heavy. But if I had asked Henry what was the most important thing in it he would have said, I suppose "the theodolite." Whereas any damned fool, provided he knows how to lead expeditions of this sort, would have known that by far the most important thing was Peter's cheese.

It has not been at all easy to keep a grip during the past week. I was over most of the shock after the first three days, but even now I find my thoughts wandering near the edge. To find oneself in the delightful process of making a new friend, a real friend, only to have him snatched away under one's eyes, is

not pleasant. Mike would have been one of my nearest friends, I think.

Henry has just produced a typical, beautiful remark: "I don't believe in thought."

Sunday, 25th.

9.30 a.m. Misty rain, and cold. A decided change in the weather. Just packing up.

1 p.m. Cloudy, but no rain. Snowy River Camp set. Henry and Peter have just left to their plane-tabling. I am going off soon (when this pipe is finished) with the binoculars to look at birds.

I am getting a little tired of Henry. Next time I come on an expedition I shall either lead it myself or make sure I know the leader first, and approve of him. To have an asentient old goat like Henry as nominal leader tries one's temper. His pompousness, or "pomposity," is unbelievable. I rather think that the leader of an expedition should be considerably older than the rest of the party.

6 p.m. Saw eagles again. Pair of them. They are drab brown in colour, lighter, and mottled, on the breast. White fetlocks. One of them, I think the male, has a lighter patch on the top of the head (sea-eagles). I watched them for an hour this afternoon.

Saw the base camp. Both tents standing. Came back feeling a little colywobbly, so went to bed. The others are back now.

I begin to appreciate Peter better. He has a funny way of looking at things. I can see that he, too, is not sure of his approval of Henry, but he is far more polite and mild about it than I could ever hope to be. He just doesn't let it worry him.

Monday, 26th.

12 midnight. It may even be Tuesday. We had an explosion last night at Snowy River. I exploded. Peter did his best to make it smoother for Henry, while backing my arguments at the same time. Only Peter could do it. Anyway, Henry was told just where he got off. He was very apologetic about it, saying it was "just his way." The thunder cleared the air a great deal, and we returned to "Shaftsbury Avenue."

Greenland Adventure: 1935

Today we came back to the base camp, taking the stuff down in two loads and Kleppering across. The Klepper is standing up well, but it has had a trying time, and it is a bit strained in all its members. We made the base about 6 o'clock, taking things easily. Tomorrow we hope to get a little cleaner.

My tent was standing perfectly, which was good, but when I opened the door I found a young lake in it. That is the Greenland way. My kit-bag was also considerably moist. Another day like today will soon dry things. Supper of canned beans and tomato, apricots, biscuits and jam, and tea. Hot lemon last thing. Pity there were no baked beans left. We must get some more from the food dump. They are much better than the canned ones.

We were discussing what we should leave behind here. I find I am like the sandy-haired owner of the yacht in the "Riddle of the Sands."³⁷ I love chucking things overboard and am leaving as much as possible. Peter is just the opposite, and gets worried if we leave a tin of butter at a camp.

Tuesday 27th, about 6 p.m.

Breakfasted this morning at 11.30. Done almost nothing all day. Began skinning my caribou hoof, but stopped when I cut my thumb, to let it heal before I went on with it. Made a scale model of the dimensions of the tent I am designing. Read Browning. The book I have is the Tauchnitz volume 2, with "In a balcony," "Dramatis Personae," and "Dramatic Romances." He has some good things to say, but most of the subject matter could better be expressed in prose.

It has been overclouded, windy and cold today. Yesterday was beautifully warm and sunny, and still. It is as though the summer was wondering whether it couldn't last another week or two after all. We decided it was too cold to worry about Kleppering across for food delicacies, such as onions and potatoes, and tinned fruit. I hope the wind keeps itself under control. My tent won't stand a storm just now.

Discussion on social service this morning at breakfast; Terrier and Boys' Clubs.³⁸

Henry is outside contemplating the infinite. He seems a little introspective today. I think he is rather haunted by the accident, a thing which I am trying hard to avoid.

Wednesday 28th.

10.30 a.m. Just had breakfast. We are all feeling shockingly slack. This afternoon Henry and I will take across the first gentle Klepper-load.

There is a sudden spate of enormous blue-bottles. A fleet of 5 of them has just zoomed into the tent, leaving a 6th as sentry outside.

8.30 p.m. Just came back from a Klepper party, with Henry. Next step to Piccadilly.

Thursday 29th.

11.45 a.m. Last night we read Kipling in turn. I wish we had brought some more decent literature. O. Henry would go down well, and I wish I had taken Jean's advice and packed Emerson with me. Peter and I are going to take another Klepper load across, so as to leave only two more for tomorrow.

5.30 p.m. Back from Klepper trip at 3.30. Henry went fishing for a short time, but caught nothing. Not surprised in this filthy water. Feeling very slack. Henry and Peter mapping in the big tent. I have returned to my bag to get really warm. They are going to wake me when the supper cooking starts. Fried potatoes, mealy puddings and beans tonight.

10. p.m. Bed. Tomorrow we clear out of this camp and go and roost on the other side until the "Nakuak" turns up. One can't take risks with the casualness of Greenlanders.

Friday, 30th.

About 6 p.m. (?) Started packing up the base camp this morning, to cross to the other side. I was standing doing nothing for a moment, when the thought came to me "The Nakuak might be there already." So I went round the corner, and there, a little dot on the fjord was herself. This demanded instant action, with our experience of Greenlanders, so Peter and I shot down in the Klepper, boarded, and took a good grip of them. I had a moist and muddy job getting the Klepper back to the base camp. Henry had packed up,

Greenland Adventure: 1935

so we took the last load down, and said good-bye to the base. The tide had fallen a bit, and the sand-flats gave us some more wet towing. But we made the "Nakuak," and went ashore, to find Peter and the Greenlanders with their boat high and dry on the mud!

Henry and I, wet through and very cold, gave Peter our remaining dry clothes to keep him warm and returned to the "Nakuak" with the "Captain" in the Klepper, changed and got warm again. We are now below, just waiting till the tide has risen enough to let Peter and the other two Greenlanders bring the last load of stuff aboard.

Saturday 31st.

12 noon. "Nakuak" anchored last night in the little inlet opposite Sarfartok, a darling little creek. Had some comic entertainment last night watching Peter putting up his bed between the two boards down here. It was piled on two bully tins, one board from a food case, and a piece of hold hatching. It was very funny, but it worked.

Heard the engine starting early this morning. Time unknown. Our last wristwatch has broken, and "Willy," who has already stopped twice, is our only timepiece. We have to add 4 hours and 5 minutes to him to give us local time.

The Greenlanders don't agree with my "overboard" tactics. They shipped five extra food cases yesterday. They will be in larder for months. We have just had a photograph parade, much to the Greenlanders' amusement. After it was over one of them made signs of drawing to me and pointed to the wee chap that I had tried to sketch on the way out. I showed him the picture, and they all chuckled with glee.

Henry is at present shaving off his beard with the hair clippers from Mt. Evans [page 19]. Getting clean again is going to be a big business. I believe there is a bath on the "Disko," but we have to get tolerably clean before that, for the benefit of Rasmussen and his household.

11.15 p.m. Itivdlek. Anchored for the night. "Werry Nice" arrived just after us

(Geodetic vessel; see p. 19). We asked him to supper, and found when he came that he had already had a big meal and was pretty sleepy. We felt it was the best way of giving him the news of Mike's death. We leave tomorrow at 5. Holsteinsborg I suppose about 8 or 9.

Sunday 1st. September

Arrived Holsteinsborg mid-day today. "Werry Nice" arrived soon after. Henry went ashore to send the cable to Max Nicholson³⁹, and brought back the news that the "Disko" is due to arrive on Tuesday and sail on Wednesday. We are now settled in our former digs. There was some pretty work getting us here. The entire populace of children helped to carry our stuff here. I saw one carrying the end of a rope that trailed from a box that another was carrying. Another young spark marched proudly along with the lid of a saucepan. Both these kids belonged to the captain of the "Nakuak." The Governor is ill just now, and in bed.

Monday 2nd. September, night.

Last night a Greenland boy arrived in the dead hours and produced a muff made of two bird skins, plucked of the outer feathers. It was wonderfully light. I bought it, or traded it, for Jean. It cost me a quarter pound of tobacco and a pipe. What with the quarter-pound I gave to our gang of porters yesterday morning, the tobacco supply is going down.

This morning we took Mike's private stuff up to Rasmussen after Henry had listed it. It is to be sent home through the Styrelse,⁴⁰ registered. He said: "Greenland has taken many men."

I went on up, or rather into, the valley behind this afternoon. It is lovely. Henry and Peter began drawing the map. Shave and wash; also lovely.

Tuesday, September 3rd. "Disko".

Snow Bunting
Redpoll
Lapland Bunting
Ptarmigan
Peregrine (1 pair)
White-tailed Sea Eagle (1 pair)



Figure 9. Sarfartok River; camp, looking upstream.



**Figure 10. Mount Atter, named for Mike Atter, taken from Rasmussen Ice Cap.
Photo: Peter Mott.**

You remember how the sudden
mountains came
As though the misty vapours of a
nightless Arctic dawn
crystallized and cold from sleep
had shed upon the day its gift of
Fairyland.
And you remember how we spoke
of climbing them;
Of that sharp gully, and the col, and
that great sloping face
Cut by the dark basaltic streak.
And you remember how the sun at
midnight, lulled to a glowing red,
Climbed down the clouds again,
Leaving a singing spoor of gold.
Rest then, your grave is in a happy
land.

* * * * *

Notes

Biographies of the four members of the Oxford University Greenland Expedition 1935

Michael Atter: Neither Peter Mott nor the author (MJD) know much of the life of Mike before the 1935 expedition (nor of the pre-expedition career of Henry Hayward, below). Mott writes (in litt.) "I really knew very little of Michael Atter. He was not an easy person to know and tended to keep his inner being to himself." I (MJD) got to know him fairly well on the expedition, as my diary records. He was very athletic and a very thoughtful man. Of his plans for his own future he said that he had really none at that time. He came from Yorkshire, and I met and stayed with his parents on more than one occasion after my return to Oxford.

Max (Maxwell John) Dunbar: was born in Edinburgh, Scotland, in 1914, and was educated at Merchiston Preparatory School, Dalhousie Castle School, Fettes College, Edinburgh, and Trinity College, Oxford. Awarded a Henry Fellowship to Yale University, 1937-38, working on marine protozoa, he finished that year with an expedition to Glacier Bay, Alaska, with a fellow Henry Fellow (Wallace Brigden), in the summer of 1938. While at Oxford he served as President of the Oxford University Exploration Club and took part in two student expeditions to West Greenland, 1935 and 1936, the first of which is the subject of this memoir. The 1936 undertaking, with Christopher Hartley, was marine in scope, covering studies of the plankton of the region of Ata Sund and a pioneer investigation of the mechanism that forms and maintains the ice-free regions at the faces of tidal (calving) glaciers, which are not uncommon in polar regions, and are ecologically significant. In 1939 and 1940 he was an invited member of the Government party on board the Hudson's Bay Company supply ship "Nascopie," working on the zooplankton in the regions of Lake Harbour and Clyde River and other points on the ship's route. On finishing his PhD degree at McGill in the spring of 1941, Dunbar was taken out of the COTC, in which he had been training with cavalry

(horses and all), and sent by the Department of External Affairs as Canadian Vice-Consul, later Acting Consul, to Greenland, completing three tours of duty at Godthab and elsewhere in the years 1941-42, 1943-44 and 1945-46. Joining the staff of the Department of Zoology at McGill University in 1946, he has remained at McGill until the present day, as Chairman of the Marine Science Centre (later Institute of Oceanography) and member of the same until its dissolution in 1987, and finally (post-retirement) with the Climate Research Group in the Department of Meteorology. Sabbatical years took him to the Greenland Fisheries Research Laboratory in Copenhagen, the Smithsonian Institution in Washington, and the British Museum of Natural History. A two-year appointment as Scientific Leader of the Gulf of St. Lawrence Program at the Bedford Institute of Oceanography intervened in 1972 and 1973. He collected certain medals, was elected to the Royal Society of Canada in 1954, and appointed Officer of the Order of Canada in 1990. He claims that the best years of his life were those following 1947, when the Fisheries Research vessel "Calanus" was built to his specifications and used in Ungava Bay, Hudson Strait, Frobisher Bay, etc., by him and his associates (all of them McGill people) for many years. She is now abandoned, on her cradle on the beach at Iqaluit, Baffin Island.

Henry Hayward: Henry has family connections in Canada, especially in Vancouver, and I believe the hydro-electric dam on Stave Lake is known as the Hayward Dam. Like Peter Mott, he was an engineering student at Oxford. I met him again in 1938 on my way to Glacier Bay in southern Alaska (or on my way home in the fall; I cannot remember), and he was great fun and full of enthusiasm for more field work. He died in Poona, India, during the war, of an infection which neither Mott nor I have any details of.

Peter Grey Mott: Born in June 1913, Peter Mott has had a distinguished career in surveying, exploration and mountaineering in the Arctic, the Antarctic, and the Himalayas. Following the 1935 expedition described in the present diary, he led two more parties to the same general region of West Greenland—Søndrestrømfjord and the Rasmussen Ice-arm

—in 1936 and 1938, and it was he who arranged for the memorial to Michael Atter in the official naming of Mount Atter. In 1939 he joined Shipton's expedition to the Karakorum Himalaya in charge of mapping. During the war he joined the Royal Engineers attached to the Indian Military Survey. From then on he became a professional surveyor; in 1952 he became Technical Director of Hunting Aerosurveys Ltd. In 1955-57 he was Organiser and Leader of the Falkland Islands and Dependencies Aerial Survey Expedition, engaged on behalf of the Colonial Office on air photography and ground control of the British sector of the Antarctic. He was awarded the President's Medal of the Photogrammetric Society, and became President of that Society in 1966. In 1978 he retired from the Hunting Group after 32 years of service with it, and from the Survey Group of which he had become Managing Director in 1972. He has a number of technical papers to his name, published in various scientific journals.

1. Sarfartok River, "the place of much current" is now called Kugsuak, "the big river".
2. An official account of this expedition was given by Henry Hayward in the Royal Geographical Society in London and published under the title "The Oxford University Greenland Expedition, 1935: A Paper read at the Afternoon Meeting of the Society on 6 April 1936," *The Geographical Journal* 88 (1936), 148-162.
3. This was Manne Rasmussen, son of the great Knud Rasmussen, Danish-Greenland explorer, whose trading company based at Thule, in Northwest Greenland, owned the schooner "Dannebrog."
4. Charles Stuart Calverley's (1831-1884) poem *Dover to Munich* reads:

We've a nun here (called Therèse)
Two couriers out of place,
One Yankee with a face
Like a ferret's;

And three youths in scarlet caps
Drinking chocolate and schnapps—
A diet which perhaps
Has its merits.

Complete Works (London, 1920), 32-33.

Greenland Adventure: 1935

5. George Robey, contemporary British comedian, (1869-1954).
6. Dogleap was the name of the farm in Northern Ireland owned by my aunt Dorothy Robertson, close to the town of Limavady (page 3). The "big doings in Derry" refer to the celebration of the Battle of the Boyne (the 12th of July).
7. Cotswolds, a region of central southern England, west of Oxford.
8. See note 6 above.
9. *The Evidence of Our Senses* by A.W.P. Wolters (1838-), London, 1933.
10. Ballymaglin, a small farm owned by my uncle Jack Moody and his wife Anna Robertson. Both the Dogleap and Ballymaglin were (and are) on the river Roe in County Derry.
11. See note 10 above.
12. Harry's Hole, a deep pool surrounded by rocky shore, County Donegal. Sometimes there were seals in it.
13. Charles Sorley (1895-1915), English poet.
14. Jean Taylor, later Lady Medawar, wife of Sir Peter Brian Medawar, Nobel Prize winner in Biology and Medicine (1915-1987).
15. Peter Venters, boyhood friend in Edinburgh and fellow student. Teacher of French language.
16. See note 14 above.
17. Moira, my younger sister, later Chairperson of the Committee on Ice in Navigable Waters, Defense Research Board, Ottawa, and Officer of the Order of Canada. Ronald was Ronald Bruce Turnbull (1914-).
18. "Dry brewing," for some reason, was the name given to the preparation of a sweet cocoa made by boys at Fettes College, Edinburgh. On certain occasions it was considered illegal, I forget why.
19. The doctor's name is probably misspelt; I knew no Danish at the time. More probably "Federspiel"?
20. Dr. Reuter, Austrian medical doctor and friend of the family.
21. Richard Tauber (1892-1948), Austrian born tenor, later a British subject.
22. Dr. Hobbs, of Chicago, had made a camp at the head of Søndre Strømfjord a few years before this episode. Camp Evans was later chosen as the site of the airport known as "Blue West Eight" during the war; now a commercial airport. Hobbs had asked us to retrieve his radiotron(s).
23. Collapsible canoe made in Austria.
24. Hoosh, stew or the like, of infinite variety.
25. Scree (talus): steep slope of broken rock.
26. "The Island" was the name we gave to a conspicuous hill up the valley of the Sarfartok River. The Lake referred to in the entry for Thursday, 15th was close to the ice-cap.
27. Paraffin, British for Kerosene.
28. See note 26 above.
29. Peter Mott went on to great things in surveying and polar work, including two years in the Antarctic. See also biography above.
30. Bep, my cousin Elizabeth Robertson, living in Edinburgh.
31. Friends in Ulster.
32. Dunfanaghy in Donegal country, N. W. Ireland.
33. Henry Havergal, music master at Fettes College, Edinburgh, in my day; later distinguished conductor, Glasgow Philharmonic, etc.
34. Thomas George Longstaff (1875-1964), British geographer and unofficial advisor to the Oxford University Exploration Club.
35. Cherwell, one of the rivers at Oxford, famed in song and story.
36. See note 25 above.
37. *The Riddle of the Sands: A Record of Secret Service* by Erskine Childers (1913).
38. Similar to "Big Brother" clubs in North America.

Greenland Adventure: 1935

39. Dr. Max Nicholson was “home agent” for our little expedition.
40. “Grønlands Styrelse,” the Danish government administration of Greenland.

A Collection of Qur'anic Codices

by Adam Gacek

The eighteen copies of the Qur'an described below come from a larger collection of Islamic manuscripts preserved in the Department of Rare Books and Special Collections and introduced in my two previous articles published in this journal.¹ These Qur'anic codices clearly stand out as a small but nevertheless interesting collection covering various periods and geographical regions. From the codicological point of view, this collection consists of twenty-nine individual codices, or portions thereof, as the nos. 16 and 18 are made up of eleven and two surviving parts, respectively.

Les dix-huit exemplaires du Coran décrits ci-dessous proviennent d'une plus vaste collection de manuscrits islamiques du département des livres rares et des collections spéciales auquel j'ai déjà consacré deux articles.¹ Ces manuscrits coraniques constituent une petite collection, qui n'en demeure pas moins intéressante, sur les diverses périodes et régions géographiques. Du point de vue codicologique, cette collection comprend vingt-neuf manuscrits individuels (codices) ou parties de manuscrits puisque les numéros 16 et 18 comprennent respectivement onze et deux parties subsistantes.

The Qur'an is traditionally regarded as the first Arabic codex *par excellence*, even though in the early years of Islam the text of the Qur'an was copied in other forms, including loose sheets and scrolls.² The terms *ṣuḥuf* (sg. *ṣaḥīfah*) and *mushaf* (or *maṣḥaf*, pl. *maṣāḥif*), which we encounter in the early Arabic sources were used very loosely and did not necessarily convey a particular form of the book.³ However, according to Arabic tradition, the Qur'anic text was also copied, from an early period, in booklets (*daftar*, pl. *dafātir*, *kurrās* or *kurrāsah*, pl. *karāris*), that is sections of bi-folios consisting of perhaps eight to fourteen single leaves (folios). These booklets came to be placed between two wooden boards (*bayna al-daffatayn*) and held together by means of clasps, consisting of knobs (*zirr*, pl. *azrār*) and fasteners (*'urwah*, pl. *'uran*).⁴ The bound codex was originally referred to as *sifr* or *mushaf*, the latter indicating something which holds *ṣuḥuf* together.⁵ Because the companions of the Prophet disliked the word *sifr* on account of its usage among the Jews, the word *mushaf*, with the usual epithet *al-sharīf*, came to be widely accepted as referring to a copy of the Qur'an in the codex form.⁶

The word *mushaf* is, nevertheless, not the only word which the Muslims have used for the Qur'an. The other two words which we often encounter are *khatmah* (pl. *khatamāt*, *khitam*) and *rab'ah* (pl. *raba'āt*). The former implies a complete text in one volume and the latter takes its name from a square-shaped box of the same name, which housed a Qur'an divided into a number of codices. This number was usually seven or thirty following the traditional division of the text which allows the Muslim to recite it either in seven or thirty days.⁷ The square-like shape of the box, also referred to in the Maghreb as *tābūt* (pl. *tawābīt*), it seems, influenced the format of the *rab'ah*. This term was predominantly used in the Maghreb (from Egypt to Andalusia). An excellent example of this kind of *rab'ah* is our codex no. 7. In the Mashriq the term predominantly used for such a box was *ṣundūq* (pl. *ṣanādiq*). It is interesting therefore to note in this connection the name of the person mentioned in the *waqf*-statement (no. 16) who is referred to as al-Ṣundūqī, i.e. the keeper of the box.

The text of the Qur'an was originally devoid not only of diacritical marks and vocalization,

but also lacked any headings, verse dividers or other editorial devices. The Arabic tradition tells us that the first thing which was introduced to the text were three dots written at the head of the verse.⁸ Despite the controversies which existed among the early theologians and traditionists regarding the purity of the original text, with time the Qur'an was not only vocalized and provided with chapter headings, but also became an object of the greatest attention on the part of the binder, calligrapher and illuminator. Its production was an act of worship governed by a set of rules called *âdâb* (etiquette).

As mentioned earlier, the Qur'an was usually divided into seven or thirty parts called *manzil* (pl. *manâzil*) and *juz'* (pl. *ajzâ'*), respectively. Each *juz'* could then be sub-divided into two halves referred to as *nisf* or *hizb* and four quarters (*rub'*). Other subdivisions included *thulth* or *thalâthat arbâ'* (as in nos. 8, 10, 11) and *thumn* (no. 13). During the recitation of the Qur'an, the Muslim is instructed to perform a number of prostrations (*sajdah*) and bowings (*rukû'*, abbr. *'ayn*). There are either fourteen or fifteen prostrations all together, usually marked as such in the margin. What is more, the 114 chapters (*sûrah*) are divided into verses (*âyah*) which are often grouped into five (*khams*, pl. *akhmâs*) or ten (*'ashr*, pl. *a'shâr*) and indicated by means of medallions called *khâmisah* (pl. *khawâmis*) and *'ashirah* (pl. *'awâshir*).

The eighteen copies of the Qur'an described below represent a variety of styles and decorative techniques used in different periods and regions. The largest group is formed of manuscripts which can broadly be characterized as being of Indo-Pakistani provenance. Here we find a superbly executed copy from Hyderabad (no. 5), bound in very elegant lacquered covers and exhibiting a Kashmirî style of decoration. The other copies worth mentioning here are: a large Bihârî Qur'an (no. 14), which is very likely to have been used originally in a mosque and another Bihârî copy (no. 16) produced in or before 908/1503 and containing a valuable *waqf*-note. There are also five copies of Turkish provenance (nos. 1, 2, 3, 4 and 9), including a seventeenth-century codex produced by the Imam of

Mehmet the Conqueror's Mosque, as well as one copy from each of the following countries or geographic regions: Egypt (7), Maghreb (6) and Sudan (13).

From the point of view of paleography and codicology this small collection provides us with a number of valuable data. It is worth mentioning here, for example, the Mamluk codex (no. 7), written on a characteristic paper of local manufacture, copied in a script which many refer to as Mamluk Naskh and bound in superbly tooled leather covers of the period. Although not dated, this codex is an excellent example of Arabic book-making in the Mamluk period. Of interest here too is the African codex (no. 13) and in particular its binding which features a single piece of leather with a leather thong attached to the end of the envelope flap. This type of binding was meant to be used as a type of portfolio holding loose leaves or quires. This appears to be one of the very early ways of "binding" Arabic codices, which survived only in Africa.⁹ Finally, mention should be made of a group of so called Bihârî codices (nos. 8, 14, 15, 16 and 18). According to present research, sometime in the 14th century, a script peculiar to India established itself as the main Qur'anic hand of the region and came to be used extensively in the 15th and 16th centuries.¹⁰ However, it is worth bearing in mind that this script was not used exclusively for the copying of the Qur'an. There is a number of extant specimens of this script used as an ordinary book hand.¹¹ I have chosen the appellation Bihârî, as the most likely, but it has to be said that this script is referred to in a variety of publications as *khatt-i bihâr*, *khatt-i bihâr*, *khatt-i bâbar*, *Bihârî*, *Bihârî* and even *Bâbarî*.¹²

In my description of the Qur'anic codices I have tried to indicate the existence or non-existence of *tarwîs* in a given hand. Although it is too early to draw any firm conclusions, there is no doubt that this line of inquiry will one day bear some fruit. At this stage, for example, it can be said that the use of right-sloping or left-sloping *tarwîs* in the Naskh script is indicative of the influence of either Arabo-Turkish or Persian schools of calligraphy, respectively. The *tarwîs* in this script, when executed by the calligraphers of the

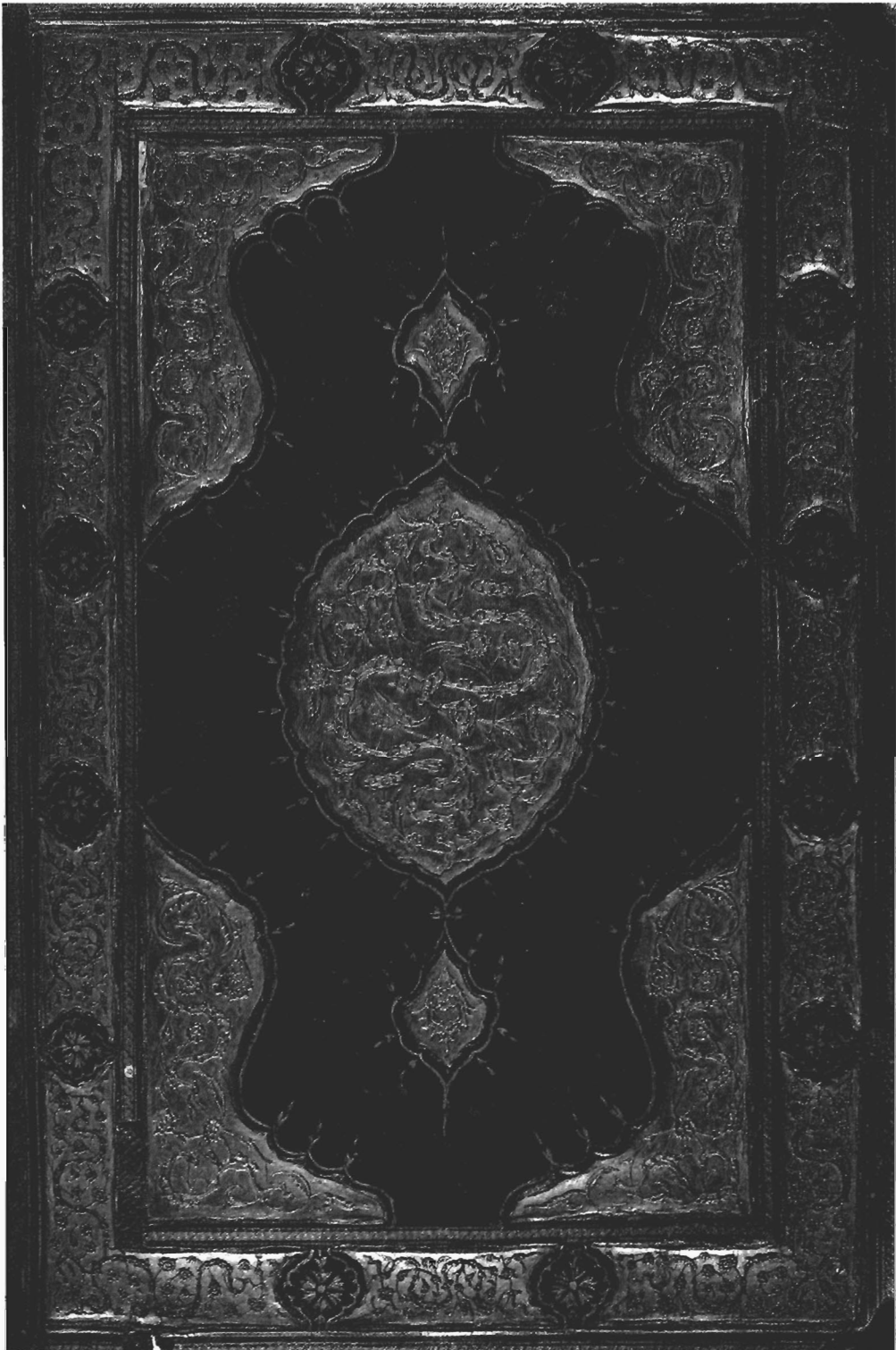
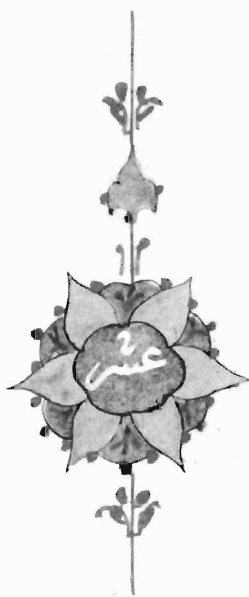


Figure 1. Codex 4, f. 112a.



إِنَّهَا تَعْمَلُونَ بَصِيرًا • وَلَا تَرْكَبُوا إِلَى الَّذِينَ ظَلَمُوا فَمَا تَسْكُمُ النَّارُ وَمَا لَكُمْ
مِنْ دُونِ اللَّهِ مِنْ أَوْلِيَاءُ ثُمَّ لَا تُنصُرُونَ • وَأَقِمِ الصَّلَاةَ طَرَفِي
النَّهَارِ وَزُلْفًا مِنْ أَلَيْسَ لِيَنَّ الْحَسَنَاتِ يُذْهِبَنَّ السَّيِّئَاتِ ذَلِكَ ذَكَرَ
لِلَّذَّكَرِينَ • وَأَصْبِرْ فَإِنَّ اللَّهَ لَا يُضِيعُ أَجْرَ الْحَسِنِينَ • فَلَوْلَا كُنَّا
مِنَ الْفَارُونَ مِنْ قَبَائِكُمْ أُولُوا بَقِيَّةٍ يَنْهَوْنَ عَنِ الْفَسَادِ فِي الْأَرْضِ
إِلَّا قَلِيلًا مِمَّنْ أَنْجَيْنَا مِنْهُمْ وَاتَّبَعَ الَّذِينَ ظَلَمُوا مَا أُتْرِفُوا فِيهِ وَكَانُوا
مُجْرِمِينَ • وَمَا كَانَ رَبُّكَ لِيُهْلِكَ الْقُرَى بِظُلْمٍ وَأَهْلِهَا مُصْلِحُونَ
• وَلَوْ شَاءَ رَبُّكَ لَجَعَلَ النَّاسَ أُمَّةً وَاحِدَةً وَلَا يَزَالُونَ مُخْتَلِفِينَ
إِلَّا مَن رَّحِمَ رَبُّكَ وَلِذَلِكَ خَلَقَهُمْ وَتَمَّتْ كَلِمَةُ رَبِّكَ لَأَمْلَأَنَّ جَهَنَّمَ
مِنَ الْجِنَّةِ وَالنَّاسِ أَجْمَعِينَ • وَكَأَلَّا نَقُصُّ عَلَيْكَ مِنْ أَنْبَاءِ الرُّسُلِ
مَا نَشِئْتَ بِهِ فُؤَادَكَ وَجَاءَكَ فِي هَذِهِ الْحَقُّ وَمَوْعِظَةٌ وَذِكْرٌ
لِّلْمُؤْمِنِينَ • وَقُلْ لِلَّذِينَ لَا يُؤْمِنُونَ أَعْمَلُوا أَعْمَالَكُمْ إِنَّا عَامِلُونَ •
وَأَنْتَظِرُوا إِنَّا مُنْتَظِرُونَ • وَاللَّهُ غَيْبُ السَّمَوَاتِ وَالْأَرْضِ وَإِلَيْهِ

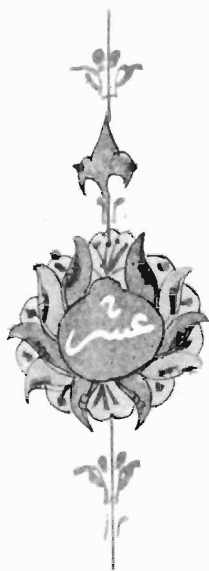


Figure 2. Codex 4.

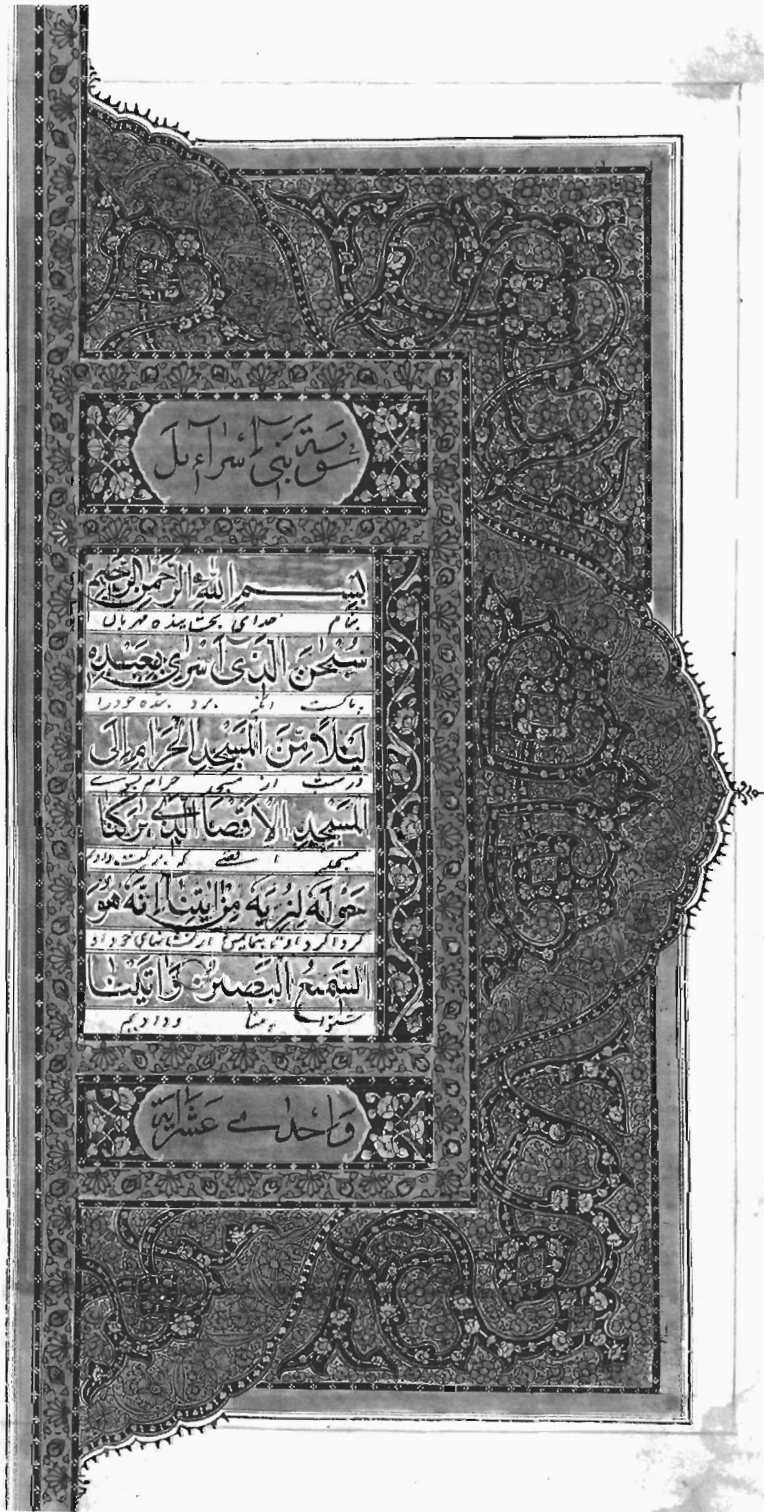


Figure 3. Codex 5, f.184b.

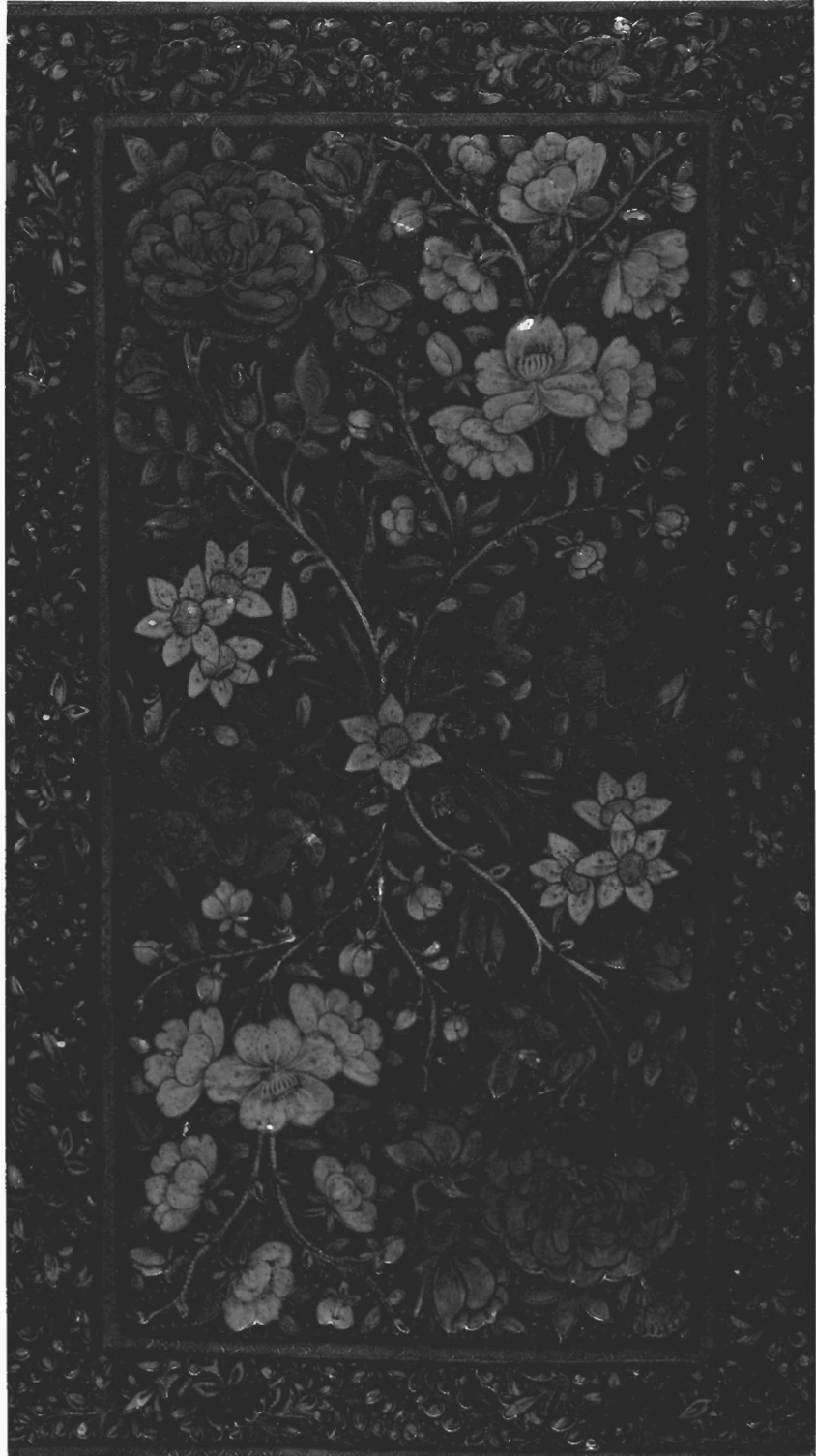


Figure 4. Codex 5.

66

الرَّسُلَ وَكُنُوا أَنْتُمْ فِدَاءَ بَرَاءِ
جَاهِهِمْ نَصْرًا فَتَجِي مَسْرُ
نَشَأُ وَلَا يَرُدُّ بِأَسَاخِرِ الْقَوْمِ
الْمُجْرِمِينَ لَقَدْ كَانَ مِنْ قِصَصِهِمْ
عِبْرَةٌ لَأُولِي الْأَلْبَابِ مَا كَانَ
حَدِيثًا يُنْتَبَىٰ وَلَٰكِنَّ تَصْدِيقَ
الَّذِينَ يَتَّبِعُونَكَ مِنْ أَهْلِ قَوْمِكَ
شَاءَ وَهَدَىٰ وَرَحْمَةً لِقَوْمٍ مُؤْمِنِينَ
بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Figure 5. Codex 6, f.66a.



صَالِحًا فَأُولَئِكَ يُدْخَلُونَ الْجَنَّةَ وَلَا
يُظْلَمُونَ شَيْئًا جَنَّاتٍ عَدْنٍ الَّتِي وَعَدَ
الرَّحْمَنُ عِبَادَهُ بِالْغَيْبِ إِنَّهُ كَانَ وَعْدُهُ
مَأْتِيًّا لَا يَسْمَعُونَ فِيهَا لَغْوًا إِلَّا سَلَامًا
وَلَهُمْ فِيهَا مَزِينٌ وَمِنْهَا بَكْرَةٌ وَعَشِيًّا



Figure 6. Codex 7, f.17b and binding.

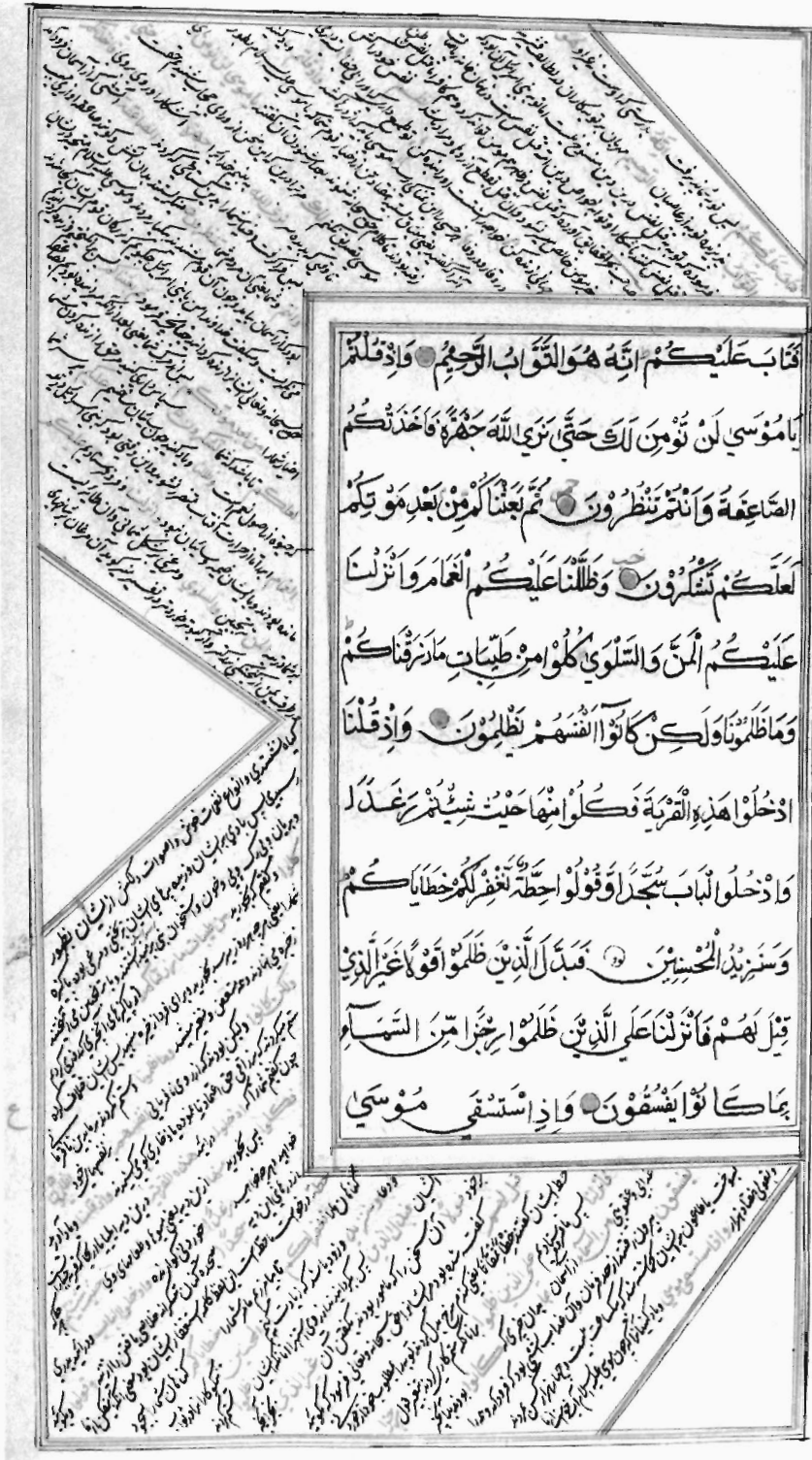
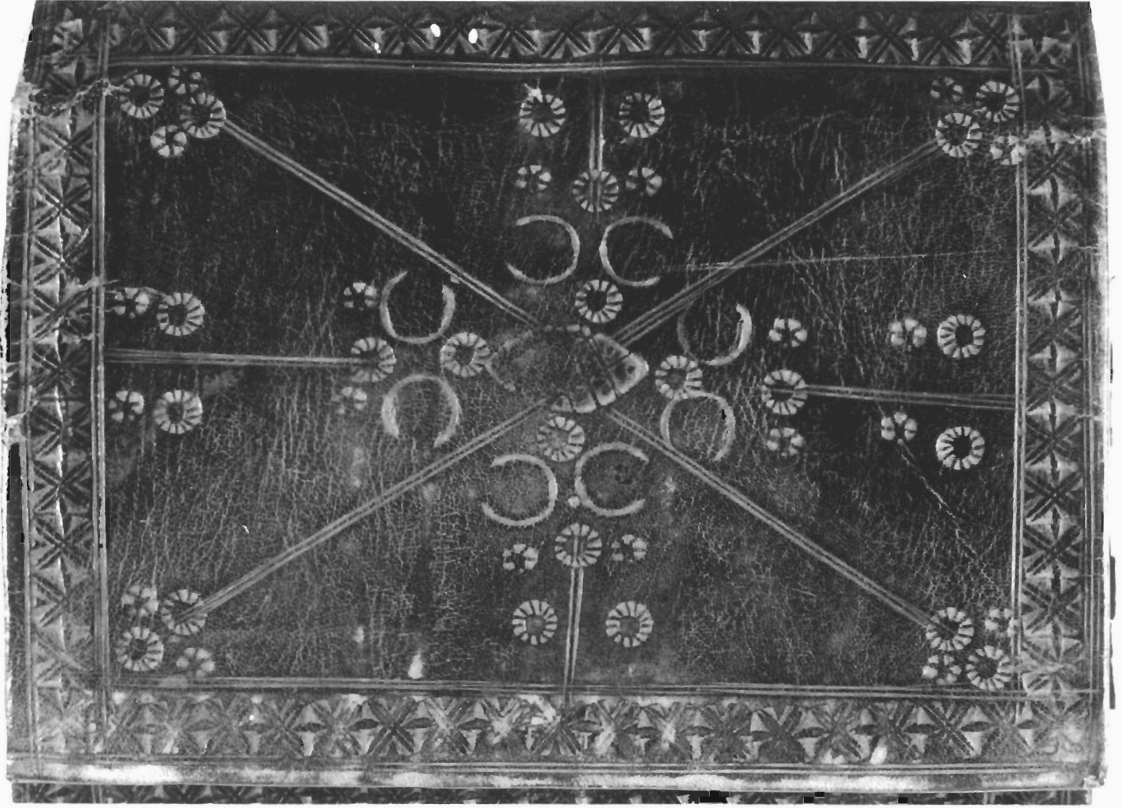


Figure 7. Codex 11, f. 6a.



حَرْبِيَّةِ السَّمَوَاتِ وَالْأَرْضِ وَلَا يَدْرِي
حِفْظُهُمَا وَهُوَ الْعَلِيُّ الْعَظِيمُ ﴿١٠٠﴾
لَا إِظْهَارَ فِي الْيَمِينِ فِي تَبْيِيرِ الرَّشْمَةِ
مِرَالِقِي بِعَرَبِيَّةٍ بِالنُّطْقِ وَيَوْمَ
بِاللَّهِ جَفَّحَ انْتَقَسَتْ جَالِقَرُونَ
الْوَقْفَى لَا نَحْضَمُ لَهَا وَاللَّهُ سَمِيعٌ
عَلِيمٌ: اللَّهُ وَلِيُّ الْبِرِّ صَوِّبُوا بِخِرْوَمِ
مِرَالِقِيَّةِ إِلَى النُّورِ وَالْبِرِّ طَبْرًا
أَوْ لِيَا وَهِيَ الطَّعُوتِ بِخِرْوَمِ
مِرَالِقِيَّةِ إِلَى الطَّعُوتِ أَوْ لِيَا عَطَمِ
النَّارِ هُمْ وَمِمَّا خَلَّتْ وَرَبِّهِ تَرَالِي
اللَّهُ

Figure 8. Codex 13, f. 2b and binding.



Figure 9. Codex 14, f. 217b.

اللَّهُ عَلِيٌّ قُلُوبُهُمْ فَهَمْ لَا يُعْلَمُونَ
خداي علی بر دلہای ایشان بر ایشان ندانند

۴۴

وہم کہ دیکھو کلام مجید و قرآن حمید بوسق
فعال نما یزید با برین حرف دیگر سہ امیدوار حضرت
بر در کار اضعف عباد دہہ متذوق بن محمد کرم دہہ
نصرتہ المحاطب من الحضرة العالمه منصور الملک منصور الملک
منصور الملک من اولاد امیر عالمہ دام عالمہ حضرت امام باقر و علی
عبد الغنی کرم دہہ نصر دہہ المحاطب منصور الملک منصور الملک
در زمانہ عمر و بعد خلفاً صالحاً تا کافہ اهل السلاطین
در انصاف بدعا نماز و سرخو بی عود و جمان پاکیزہ

و تفسیر صحیح شرعی تا هیچ کسی بهیچ تا دہلی لذتا و دیگر
شرعی مکتب خود نسا زلا و ندران و دہہ نکلند و نہ بخند
و نہ فرو نژاد بدل نکلند و کہ ندر سر اصل تجارت کند خصم ان
صاحب کلام مکتب العلام با نژاد بحکم قولہ تعالی
فمن بدلہ بعد ما سمرحہ فانما اثمہ علی
الذین یبدلونہ ان اللہ سمیع علیم
اگر جہی یاد دہے فوسق مولانا معود نور
صند و قے قلعه رنہ پور را خیر کتند تا نویسانند
تمام کرد اند السراج فی شهر المبارک رمضان
عشر کاتبہ سماں و دہہ

Figure 10. Codex 16, ff. 42b-43a.

A Collection of Qur'anic Codices

Turkish school, is often hooked. Furthermore, the *alif* of Naskh (when forming part of the definite article) is in the overwhelming number of cases devoid of *tarwîs*. The use of *tarwîs* on other letters (mainly the *alif* in the *lâm alif*, initial *lâm* and *tâ'*) in this script or alternatively its complete absence may be indicative of schools of calligraphy or the individual styles of scribes and calligraphers. This is the case e.g. with the Mamluk Naskh, which, to judge from extant specimens, is executed without *tarwîs*. It could also be that an unsystematic use of *tarwîs* in Naskh is a result of carelessness on the part of the calligrapher.

DESCRIPTION OF THE CODICES

1 (A16)

ff.[302], 177 × 110 / 123 × 68 mm., 15 lines per page. Written on European laid paper (watermark: crown and grapes; GAVLAC). Fully vocalized Naskh script in black with recitation marks in red ink and chapter headings in white on gold background. This hand uses a small hooked *tarwîs* (characteristic of Turkish hands) on the *lâm* (going to the right) and *alif* in *lâm alif al-warrâqîyah* (descending to the left). The codex opens with a rubbed double frontispiece. The text is enclosed in a golden frame and is divided by means of gold discs. The margins carry floral medallions, the words *hizb* and *'ashr*, as well as some corrections. Bound in dark-red morocco with onlaid centre medallions, pendants and corner pieces. Executed by 'Abd Allâh ibn 'Abd al-Rahmân, a pupil of Râsim Muḥammad Afandî in 1154 i.e. 1741-2.

2 (A17)

ff.[153], 175 × 112 / 135 × 74 mm., 30 lines per page. Written on European laid paper (watermark: lion passant guardant; C N A and I M C?). The text is written in a very small, fully vocalized Naskh hand in black ink, arranged into two medallions per page within a rectangular panel. This hand is characterized by the unsystematic use of *tarwîs*. The volume opens with an illuminated double page frontispiece, now rubbed and damaged. Numerous floral designs in the margins. The margins also carry a number of corrections and the word *hizb*. Bound in dark-red morocco

with onlaid centre medallions and corner pieces. Executed by Muḥammad al-Hilmî, a pupil of Muḥammad al-'Alâ'î Muḥammad 'Abd Allâh, in 1240 i.e. 1824-5. According to the colophon, this is the sixth copy of the Qur'an executed by his hand.

3 (A18)

ff.[i,305], 197 × 122 / 135 × 70 mm., 15 lines per page. Written on European glazed wove paper of biscuit tincture in a fully vocalized Naskh hand. The *tarwîs* occurs only on the letter *alif* of the *lâm alif al-warrâqîyah* and points to the left. The main text is executed in black ink; recitation marks in red and chapter (*sûrah*) headings in white on imitation gold background. The codex opens with a richly illuminated double frontispiece characterized by a floral design. Floral designs are also used for marginal medallions. There are in all fortythree of these medallions. The marginal marks indicating the division of the text are not indicated. Bound in red morocco, the main panel consists of a pattern of dots. This codex is the work of Hâfiz Aḥmad Hilmî, a pupil of Muḥammad al-Ḥamdî, known as Nafs al-Bakbâzârî Bawâsh zâda (thus), who executed it (*kataba*) in 1284, i.e. 1867-8. This is the fifth copy of the Qur'an (*muṣṣhaf*) executed by his hand (see *taṣḍîq*, f.305a).

Purchased from Dr. Patton in June 1929.

4 (A19) Figures 1 and 2

ff.[309], 267 × 180 / 190 × 110 mm., 13 lines per page. Written on thickish non-European laid paper of biscuit colour, characterized by wavy laid lines. Fully vocalized Naskh hand with the word *Allâh* in gold and recitation marks in red ink. This hand is generally devoid of *tarwîs* except in the case of *lâm alif al-warrâqîyah* where it occurs on the *alif* and points to the left. The codex opens with an illuminated double frontispiece. The text is enclosed in a golden frame and blue rule-borders. *Sûrah*-headings are executed in white on gold background and enclosed in illuminated headpieces. The text division into *juz'*, *hizb*, and *'ashr* is shown by means of illuminated marginal medallions. Bound in dark-brown morocco with blind-stamped panels, medallions and pendants filled with arabesque designs. The stamped surfaces are brushed

A Collection of Qur'anic Codices

with gilt. The spine is broken and the flap wanting. This manuscript was executed by Husayn ibn 'Alī al-Amāsī, Imam of the Abū al-Faḥḥ Sultān Muḥammad Khān (Mehmet the Conqueror) Mosque in Rabī' II, 1072 (date given in Turkish) i.e. 1661. This is the 22nd copy of the Qur'an executed by his hand. Folio 1a contains a bequest (*waqf*) note addressed to al-Sayyidah Hanīfah, daughter of a certain 'Alī Bāshā, dated 15 Jumādā I 1237 i.e. 1822.

5 (A20) Figures 3 and 4

ff.[409], 286 × 167 / 286 × 157 mm., 13 lines per page. Written on fine, glossy and cream-coloured non-European paper having dense and regular laid lines. Fully vocalized Western Indian Naskh hand with an interlinear Persian translation in Nasta'liq. The Naskh hand has no *tarwīs* on *alif* and *lām*, except in the *lām alif al-warrāqiyah*, where it protrudes to the left. The Qur'anic text is in black and the translation in red ink. The codex opens with a superbly illuminated double frontispiece executed in Kashmiri style. Similar double-page illumination can be seen on ff.184b-185a and 408b-409a. The text is enclosed in a golden frame with inner and outer deep-blue rules. *Sūrah*-headings are enclosed in rectangular headpieces and executed in deep-blue ink on gold background. An additional outer frame is provided for marginal decorations and comments. Here we find *juz'*-numbering and short versions of *sūrah*-headings placed in corners. Other elements include illuminated medallions and the markings '*ayn*, *thalāthah*, *rub'*, *nisf* and *sajdah*. Bound in very elegant lacquer covers without flap. The central panel of the upper and lower covers consists of an intricate flower design, featuring, among others, dahlias and apple blossoms. Executed (calligraphed and illuminated) in Haydarābād between 1282/1865-6 and 1289/1872-3. The first date appears at the end of the text and therefore is likely to be associated with the copying and the second one appears in the statement on f.409b in the statement: *nivish-tah shud dar farkhundab-i bunyād-i Haydarābād dar sanah 1289*.

Purchased from Meyers and Co. Ltd. in 1943 and presented to the library by Lady Roddick.

6 (A21) Figure 5

ff.[70], 235 × 165 / 180 × 114 mm., 10 lines per page. Written on thick European laid paper (watermark: anchor, B—see e.g. ff.40, 44). Bold, fully vocalized Maghribī hand with *hamzah* indicated by a yellow dot, *tashdīd* and *sukūn* in blue and *fatbah*, *kasrah*, *dammah* and *alif* of prolongation in red. The final *fā'*, *qāf* and *nūn* are not pointed. The text begins with an illuminated headpiece containing *al-isti'ādhah* (an invocation against Satan: *a'ūdhu bi-Allāh min al-shaytān al-rajīm*) and is followed by v.93 of ch.9 (*Sūrat al-Tawbah*). It ends with v.18, ch.13 (*Sūrat al-Ra'd*), followed by the *taṣḍīq* (*ṣadaqa Allāh al-Aẓīm*) and colophon. The text is enclosed in one blue and two red rules. The *sūrah*-headings are written in gold in either Maghribī or ornamental "Kufi" scripts and marked out by means of marginal palmettes (there are no surrounding panels). The same applies to the words *ḥizb*, *rub'* and *nisf* written in the margins. A round medallion is used for the word *ḥizb* on ff.15a, 29a, 41b and 56b. Another medallion of conic shape is used for the word *sajdah* (f.69b). Bound in red morocco with simple blind tooling and onlaid medallions. The name of the calligrapher is not given. According to the colophon this is Volume (*juz'*) 5 of a set (*tajzi'ah*) of 12 volumes executed in 1144/1731.

Purchased from Miss Fisher in 1927.

7 (A22) Figure 6

ff.[46], 210 × 164 / 150 × 105 mm., 5 lines per page. Written on thick laid Mamluk paper characterized by the existence of chain lines grouped in threes and running obliquely across the face of the page. The distance between the chain lines is ca. 10 mm. and 45 mm. between each group. Executed in fully vocalized al-Naskh al-Faddāh hand, the main characteristics of which are the complete lack of *tarwīs*, the systematic use of *lām alif al-warrāqiyah*, and the height of the *alif* being 9-10 mm. The main text is in black ink whereas the *sūrah*-headings are executed in gold outlined in black (ff.9a, 23b) in the form of Tawqī' script, similar to the one used by Ibn al-Wahīd (see D. James, *Qur'ans of the Mamlūks*. London, 1988, pp. 35-65.).

A Collection of Qur'anic Codices

The verses of the Qur'an are divided by means of gold florettes. The codex begins with an illumination on the recto of the first folio consisting of a panel divided into a cartouche and a multi-lobed medallion carrying an inscription: *al-sâdis 'asbar min al-rab'ah al-sharifah nafa'a Allâh bibâ*. This inscription tells us that this is the sixteenth volume of the Qur'an out of most probably a set of thirty volumes. It contains v.72, ch. 18 (*Sûrat al-Kahf*) through ch.20 (*Sûrat Tâ Hâ*). The end is marked by a large circle (*shamsab*) with the inscription in decorative "Kufi": *khitâmubu misk* (perhaps the equivalent of "finis coronat opus" or "the crowning touch"). The predominant colours used in the decoration are gold and lapis lazuli.

Other illuminations include round medallions in the margins with the words *hizb, nisf, rub', sajdab*. The volume is marked throughout as *waqf* and a badly rubbed inscription on the recto of the first folio reads: *maqarruhu bi-al-Barqûqîyah bi-al-Sahrâ*, referring to al-Khânaqâh al-Barqûqîyah in the desert i.e. *extra muros*, an institution built for the Mamluk Sultan Barqûq by his son Faraj (d.815/1412), where the present copy was deposited. Bound in dark-brown leather, blind-tooled with gold dots. The centre panel consists of a typical Mamluk decoration with a ten-pointed star in the centre and a pattern of interlacings. The doublures are of blocked pressed leather. The front cover is now detached and damaged. The calligrapher of this manuscript is not known despite the statement on the last folio written in a clumsy hand attributing the work to Ibn Muqlah (d.328/940) (*barrarahu Ibn Muqlah al-Wazîr al-A'zam!*). The date is also not given. However, on the strength of the evidence which we have before us it is likely to have been executed in the 8/14th century.

Purchased from H. Khan Monif, New York.

8 (A23)

ff.506, 106 × 95 / 80 × 60 mm., 17 lines per page. Written on brown non-European paper having faint laid lines sometimes completely disappearing, giving the appearance of wove paper. Fully vocalized small Bihârî script (without *tarwîs*) using black and red ink. The text is enclosed in one blue and two red rules.

The text begins with a double page, bearing somewhat simple illumination. The same double page illumination is repeated on ff.121b-122a, 248b-249a and 374b-375a. Other illuminations include medallions with the word *juz'*. The *sûrah*-headings and recitation marks are written in red and so are the words such as *nisf, rub', sajdab, thalâthat arbâ'* and the letter '*ayn* indicating the division of the text. The margins also carry some corrections and explanations in Persian, a number of which are headed by what appears to be the word *fasl* or the abbreviation of *fâ'idat al-aşl* (cf. no.12). Bound in recent brown leather binding without flap. Copy anonymous and undated. Most probably 10/16th century or later.

Purchased from H. Khan Monif in 1928.

9 (A24)

pp. 708, 150 × 103 / 105 × 55 mm., 13 lines per page. Written on laid European paper (watermarks: 1. a cross-bow; trefoil B A 2. pascal lamb; trefoil C B 3. anchor in a circle; trefoil C B).

Copied by two Naskh-based hands, the second being very cursive and characterized by a pronounced tilt to the right. Rule-borders, *sûrah*-headings and round dots are executed in red. Bound in dark-brown morocco with blind-stamped central medallions. Anonymous and undated copy. Probably mid 13/19th century. The last *sûrah* is followed by a comment in Ottoman Turkish on the mystical significance of the Arabic letters.

10 (A25)

ff.[466], 300 × 215 / 218 × 120 mm., 11 lines per page. Written on brown, non-European paper of wove texture and very flocculent. Fully vocalized Naskh hand, using *tarwîs* only on the *alif* of the *lâm alif al-warrâqîyah*. *Sûrah*-headings and recitation marks in red ink. The text is enclosed in two red and one blue rules. The margins carry marks relating to the division of the text such as *juz', sajdab, nisf, rub', thalâthat arbâ'* and the letter '*ayn*. This copy is anonymous and undated; probably late 12/18th or 13/19th century. The main text is followed by a prayer for the Prophet Muhammad in the form of a poem (forty

A Collection of Qur'anic Codices

verses) beginning: *al-ṣalāh wa-al-salām 'alayka yâ rasûl Allâh*. The recto of the first folio has an invocation *yâ kabîkaj* and two unintelligible notes. Bound in light-brown morocco with onlaid medallions.

Purchased in 1922 for \$25.00 from C. Bryant of the 2nd Queen's Regiment, who obtained it in 1897 at Tirah on the North-Western Indian frontier.

11 (A26) Figure 7

ff.[415], 345 × 215 / 303 × 165 mm., 11 lines per page. Written on glossy, creamy non-European paper characterized by very fine laid lines, sometimes almost invisible. Fully vocalized Naskh hand (using *tarwîs* only occasionally and unsystematically), with *sûrah*-headings and recitation marks in red ink. At the beginning and the end of the codex there are eighteen and twenty blank end-papers. The Qur'anic text opens with a double-page illumination in gold, blue and dark-red. The pages are divided into two major panels: the inner carrying the text of the Qur'an and the outer filled with a commentary in Persian by Kamâl al-Dîn Husayn Kâshifî Sabzavâri (d.910/1504-5) and entitled *Mavâhib-i 'aliyah* (published in Tehran 1317-29 A.H.). The commentary is transcribed obliquely in an elegant Nasta'liq hand. The margins carry marks relating to the textual division of the Qur'an such as *juz'*, *nisf*, *rub'*, *thalâthat arbâ'* as well as corrections and short comments. Bound in dark-brown morocco with blind-stamped medallions and panels brushed with gilt. The front cover is now detached. No date of copying or name of scribe is given; probably 12/18th century.

12 (A27)

ff.[517], 315 × 228 / 242 × 157 mm., 9 lines per page. Written on biscuit colour, fine non-European paper having fairly regular laid lines. Fully vocalized Naskh-based hand with an interlinear Urdu translation in Nasta'liq. One of the characteristic features of this hand is the use, though somewhat unsystematic, of *tarwîs* on the *alif* and *lâm*, protruding to the left. The Qur'anic text is in black and the translation in red ink. The text is enclosed in a golden frame with red and blue rules on each side and the *sûrah*-headings are executed in red or white on

either a plain or golden background. Polychrome illumination is also used for the division of the text (*juz'*, *nisf*, *rub'*, *thuluth*, *saj-dab*). Marginal annotations in Urdu are headed by the letter *fâ'* (initial form) or *fâ'* and *ṣâd* (initial, suspended form), the latter written above the elongated horizontal stroke of the *fâ'*. The letter *ṣâd* is also used to indicate the end of the marginal note. These letters most probably represent the words *fâ'idab* (note) and *aṣl* (original text, i.e. the text enclosed in the central panel), being part of the original expression *fâ'idat al-aṣl* (cf. no. 8). A note on f. 1a-b tells us that the translation is by 'Abd al-Qâdir, son of Walî Allâh ibn 'Abd al-Rahîm Muhaddith Dihlavî, and made in 1205/1790-91. The present copy is not dated, but is likely to have been executed either in 1205 or shortly afterwards. It is bound in red morocco with onlaid medallions, pendants and corner pieces (flap missing).

13 (A28) Figure 8

ff.[ca.300], 215 × 165 / 160 × 105 mm., 11 lines per page. Written on brown wove European paper. Fully vocalized African (Sûdâni) hand using brown ink. The characteristic feature of this hand is the existence of a *tarwîs* on the *alif* and *lâm*, projecting in most cases to the right but sometimes to the left, as well as the 'tail' on the *alif* of prolongation. The final *nûn* and *qâf* are not dotted, but the *fâ'* is. The folios are loose and in disorder. Simple decoration can be found on the first and last folios. Additionally, the word *hizb* is enclosed in a circular medallion divided into eight compartments and an inner circle. Other textual divisions include *nisf*, *rub'*, *thumn* and *sajdab*. The margins carry a number of corrections marked with the letter *kbâ'* (initial form) superscript and the placet (*sahha*) situated at the end of the correction. The verses are separated by means of three dots arranged in the shape of a triangle and sometimes outlined to give it the shape of a three-petalled florette. The copy is anonymous and undated (mid 13/19th century). The loose folios are protected by a blind-stamped, red morocco casing with a thong attached to the extreme end of the envelope flap.

Purchased from H. Khan Monif in 1942.

14 (A29) Figure 9

ff.[439], 575 × 325 / 360 × 210 mm., 15 lines per page. Written on non-European paper of biscuit colour and having fine and regular laid lines. Executed in a large, fully vocalized Bihârî hand with the initial, median and final lines in a thicker and larger script of Thuluth type (the height of *alif* being 30 mm.), with a systematic use of *tarwîs*, descending to the right. The Bihârî hand is entirely devoid of *tarwîs*. The volume begins with a double-page illumination containing five empty medallions per page. This is followed by another double-page illumination containing the opening verses of the Qur'an. Other double-page frontispieces are located on ff.105b-106a, 217b-218a and 324b-325a. Among the illuminated pieces are medallions carrying the words *juz'*, *rub'*, *nisf*, *thalâthat arbâ'* and *sajdah*, as well as *sûrah*-headings and the word *Allâh*. The main text is enclosed in a ruled panel and surrounded by two outer panels, the first containing selected key words written in red and blue and the other glosses in Persian arranged in a zigzag form. The main text is followed by a Persian commentary on *Sûrat al-Fâtihah* and *Fâl-i Muşhaf*, a divinatory poem (also in Persian) consisting of 193 verses and divided by means of the letters of the alphabet into groups of six or seven *dû bayt*. Bound in lacquer covers with simple decoration consisting of a central medallion and floral decoration in the corners and border. This copy is anonymous and undated; probably 10/16th century or earlier.

Purchased from H. K. Monif.

15 (A30)

ff. 85, 225 × 135 / 154 × 85 mm., 7 lines per page. Written on brown non-European paper characterized by wavy and thick laid lines, sometimes not easily visible. Fully vocalized Bihârî hand (using occasionally right-sloping *tarwîs*) in black ink and *sûrah*-headings, the word *Allâh* and the interlinear Persian translation in red ink. There is no textual division except for the letter '*ayn*'. The present codex is acephalous and contains a selection of short chapters beginning with *Sûrat Yâ Sîn* (36) and ending with *Sûrat al-Nâs* (114). Bound in a recent red morocco of European style (without

flap). The codex was remargined most probably at the time of binding. The folios 51-71 were added later. The colophon reads: *tarikb-i nuhum-i mâb-i Dhî al-Hijjah yawm al-ahad sanah [...{erased!}] [bi-yad?] khâkbây-i muharrirân faqîr kabîr*. W. Ivanow gave this manuscript to Dr. Casey A. Wood who estimated that it was originally written about 1487. This date is quoted in a note pasted on the verso of the last folio, written in Colombo, Ceylon, Dec., 10, 1926 and signed by Casey A. Wood.

16 (A31) Figure 10

A collection of eleven (out of the original thirty) parts (*juz'*) of the Qur'an executed before 4 Ramaḍân 908/1503.

(1) ff.[37], 233 × 164 / 167 × 115 mm., 7 lines per page. *Al-Juz' al-thânî* (ch.2, v.142—ch.2, v.222). The present part is imperfect at the end and after f.23. Written on thick, non-European paper with laid lines only faintly visible. Fully vocalized Bihârî hand (without *tarwîs*). The codex opens with an illuminated circular *shamsah* and a double-page frontispiece. The first two pages, the word *Allâh*, discs and florettes are executed in gold. The other illuminated elements include marginal medallions (*nisf*, *thalâthat arbâ'*) and the letter '*ayn*'. The text is enclosed in blue and red rule-borders. It is provided with an interlinear Persian translation in red ink. No date.

(2) ff.[45]. Written by the same hand as above, this codex contains *al-juz' al-khâmis* (ch.4, v.24—end of ch.4). It is provided with a *waqf*-note in Persian (ff.45a-b) dated 4th of Ramaḍân 908/1503. The note gives the founder's name as Karam Allâh Naşr Allâh al-Mukhâtib, an official in charge of property (*Mutaşarrîf-i Mamâlik-i Dîvân-i 'Alî*) in the ministry of Shâh Bâbâr (thus), Mañşûr al-Mulk ibn Mañşûr al-Mulk and states that if there is anything missing from this *juz'*, it should be brought to the attention of Mas'ûd Nûr Sundûqî (i.e. the keeper of the *şundûq*, a box for housing copies of the Qur'an) of the fort (*qal'ah*) R.τ(?)h.h.w.r, perhaps a corruption of Ranthambhor.

(3) ff.[33]. Executed by the same hand as the preceding parts, this is *al-juz' al-thâmin* (ch.6, v.111—ch.7, v.87). There is a lacuna after f.26

and the folios 27-33 had been supplied in a different and later hand, without Persian interlinear translation.

(4) ff.[43]. This is *al-juz' al-'âshir* (ch.8, v.41—ch.9, v.93) of the same copy of the Qur'an. The folios 20-25 are badly mutilated. Appended to this part is the same *waqf*-note as above dated 4 Ramaḍân 908/1503.

(5) ff.[48]. *Al-juz' al-khâmis 'ashar* (ch.17, v.1—ch.18, v.74). The folios 42-48 were supplied later and have not Persian interlinear translation.

(6) ff.[38]. *Al-Juz' al-sâdis 'ashar* (ch.18, v.75—ch.20). Provided with the same *waqf*-note as above.

(7) ff.[37]. *Al-Juz' al-tâsi' 'ashar* (ch.15, v.21—ch.27, v.59).

The folio 37b carries the introductory portion of the same *waqf*-note as above.

(8) ff.[42] *Al-Juz' al-hâdî wa-al-'isbrûn* (ch.29, v.45—ch.33, v.30). The folio 42a contains the end portion of the *waqf*-note.

(9) ff.[40]. *Al-Juz' al-râbi' wa-al-'isbrûn* (ch.39, v.32—ch.41, v.46). There is a lacuna after f.38. Appended to this *juz'* is the same *waqf*-note, dated 4 Ramaḍân 908/1503.

(10) ff.[44]. *Al-Juz' al-khâmis wa-al-'isbrûn* (ch.41, v.47—ch.45). It contains the initial portion of the same *waqf*-note.

(11) ff.[34]. Various fragments such as a portion of *al-juz' al-thâmin* and *al-juz' al-thâmin 'ashar*. The last folio carries the same *waqf*-note as above, dated 4 Ramaḍân 908/1503.

17 (A32)

ff.[7], 220 × 155 / 180 × 105 mm., 11 lines per page. A portion of the Qur'an containing *Sûrat al-Mulk* (67), *Sûrat al-Dabr* (76) and *Sûrat al-Mursalât* (77). Written on non-European laid paper with thickish laid lines. Fully vocalized Naskh (with occasional but unsystematic use of *tarwîs*), Muḥaqqaq and golden Tawqî' scripts. The Muḥaqqaq is used in the initial, median and final lines of the page and the Tawqî' for headings. The fragment begins with a badly damaged circular medalion and a double-page illumination and has

the text divided into panels. The *sûrab*-headings, discs, rosettes are executed in gold and blue. The folios have been remargined. On the verso of the last folio there is a *waqf*-note written in the same hand as in no. 16 and dated Ramaḍân 908/1503.

18 (A33) Two parts (*juz'*) of the Qur'an.

(1) ff.[37], 230 × 155 / 193 × 107 mm., 9 lines per page. *Juz'* 22 (ch.33, v.31—ch.36, v.21). Written on non-European paper having thick and fairly regular laid lines. Fully vocalized Bihârî hand, with occasional left-sloping *tarwîs*. The *sûrab*-headings, recitation marks and rule-borders are in red ink. The verses are divided by means of a yellow circle with one red dot inside and four dots on the circumference. Note on the verso of folio 37. No date (early 10/16th century).

(2) ff.[35], 210 × 150 / 170 × 108 mm., 7 and 9 lines per page. *Juz'* 23 (ch.36, v.22—ch.39, v.31). Executed by the same hand as above (1). No date.

* * * * *

Notes

I am greatly indebted to Dr. Eric Ormsby, Director of McGill University Libraries, for reading the final draft of this article and making valuable suggestions.

1. Adam Gacek, "Arabic calligraphy and the 'Herbal' of al-Ghâfiqî, a survey of Arabic manuscripts at McGill University," *Fontanus* 2 (1989), 37-53; idem, "Early Qur'anic fragments," *Fontanus* 3 (1990), 45-64.

2. See e.g. Solange Ory, "Un nouveau type de muṣḥaf; inventaire des Corans en rouleaux de provenance damasquine conservés à Istanbul," *Revue des études islamiques* 33 (1965), 87-49.

3. Nabia Abbott, "Arabic paleography," *Ars Islamica* 8 (1941), 67; A.F.L. Beeston et al. *Arabic literature to the end of the Umayyad period* (Cambridge; Cambridge University Press, 1983), 22-23, 527, 528.

4. This is e.g. the case of the codex of Khâlid ibn Ma'dân (d. 103/721-2), see 'Abd Allâh ibn Abî Dâ'ûd al-Sijistânî, *Kitâb al-maṣâhib* (Beirut: Dâr al-Kutub al-'Ilmiyah, 1985), 150.

5. 'Alî ibn Ismâ'îl ibn Sîdah, *Kitâb al-mukhassaṣ* (Cairo, 1318-20 A.H.), v.4, pt.13, 8.

6. Itimâd Yûsuf al-Qusayrî, *Fann tajlîd al-kitâb 'inda al-Muṣlimîn* (Baghdad: al-Mu'assasah al-'Âmmah lil-Âthâr wa-al-Turâth, 1979), 12.

7. Adam Gacek, "The ancient *sijill* of Qayrawan," *MELA Notes* 46 (1989), 26, 29, no. 11.

8. Jalâl al-Dîn al-Suyûtî, *al-Itqân fî 'ulûm al-Qur'ân* (Osnabrück, 1980), 2:869-870.

9. See Bakr ibn Ibrâhîm al-Ishbîlî (d. 628 or 629/1231 or 1232), "Kitâb al-taysîr fî ṣinâ'at al-tasfîr," *Revista del Instituto de Estudios Islamicos en Madrid* 7-8 (1959-60), 25. The use of a string or a leather thong of this kind can also be seen on outer, usually envelope-shaped cases used for extra protection of the bound codex.

10. Jeremiah P. Losty, *The art of the book in India* (London: British Library, 1982), 38-40.

11. See e.g. Adam Gacek, *Arabic manuscripts in the libraries of McGill University, union catalogue* (Montreal: McGill University Libraries, 1991), nos. 3/2, 13, 131, 140/1, 151, 225.

12. "Khatt," *Encyclopaedia of Islam*, new ed., (4), 1127; F. Déroche, *Catalogue des manuscrits arabes, les manuscrits du Coran* (Paris: Bibliothèque Nationale, 1985), 13, 140; D. James, *Islamic calligraphy, sacred and secular writings* (Geneva: Musée d'art et d'histoire, 1988), 166.

Venice and Crete: Documents from the XVIth to XVIIIth Centuries

by Dionysios Hatzopoulos

Nineteen manuscripts, all containing official documents, are presented in this article. They refer to Venetian involvement and presence in the Levant, mainly in Crete. They cover the period between the end of sixteenth and the beginning of eighteenth centuries, when the struggle with the Ottomans had reached its most critical point. The documents mention the activities of members of the Mormori, Cattaneo and Michieli families. In addition, a legal document is presented: a "livello" (long term lease) executed in Crete.

Dix-neuf manuscrits regroupant tous des documents officiels, sont présentés dans cet article. Ils se rapportent à la présence vénitienne au Levant et notamment en Crète. Ils couvrent la période allant de la fin du XVI^e siècle au début du XVIII^e siècle, époque à laquelle la lutte contre les Ottomans avait atteint son point culminant. Les documents fournissent des indications sur les activités des membres des familles Mormori, Cattaneo et Michieli. Un acte notarié ("livello") exécuté en Crète y est également présenté.

Venetian rule in Crete or Candia, as it was also known then, from the name of the capital city, dated from the first decade of the thirteenth century (Figure 1). The collapse of the Byzantine Empire, following the occupation of Constantinople by the knights of the fourth crusade in 1204, was followed by the distribution of Byzantine territories among the victors. Crete was initially given to Boniface of Montferrat who, in turn, sold the island to Venice in August 1204.¹

While the Republic's initial interest was limited to the use of the island's main harbours, especially that of the capital city of Candia, now Herakleion, by the long haul convoys plying the sea lanes between Venice and the Levant, the final elimination of the Byzantine state by the Ottomans, in 1453, changed the area's geopolitical realities. Venice faced now a strong expansionist state. This, and the fact that the local Greek population, especially the Greek speaking nobility, could no longer refer to an independent Greek political center, brought a mutual change of attitudes.

Relations between the Venetian masters and the local population improved, especially among the upper and middle classes. Many Greeks served Venice faithfully and fought against the common enemy down to the bitter end in 1669, when the island, after a protracted struggle, was finally occupied by the Ottomans.

The administrative system in Crete was based on the metropolitan one. The central administration—Regimen—sat in Candia and was composed of three members: the Duke and two councillors. They were appointed by the Venetian Senate for a period of two years. In the fourteenth century the island was divided in four administrative districts (territoria): Candia, Canea, Rethymno and Siteia. The office of Proveditor General, combining military and administrative authority, was introduced in 1569.² Local nobility, Italian and Greek speaking, had limited authority, being only consulted in its collective bodies: the Consilium Feudatorum, the Maggior Consilium and the Consilium Rogatorum.³

Noua Græcia, secundum omnes eius regiones & prouincias citra & ultra Hellespontum.



Venice and Crete

Figure 1. From Sebastian Münster's Cosmographia, ca. 1544.

Venice and Crete

During the four centuries of Venetian administration Cretan society remained almost unchanged. It was strongly stratified, with the local nobility at the top (*nobili*), followed by the urban middle class (*cittadini*). The bottom of the social scale was occupied by the urban poor (*plebe*) and the peasants, either free or serfs (*contadini*, *villani*).

A few years ago I published with commentary three Venetian manuscripts,⁴ seen at McGill and initially recorded by Seymour de Ricci, concerning Emmanuel Mormori, a Cretan officer in the service of the Venetian Republic in the sixteenth century.⁵ Recently, I was pleasantly surprised to be told by Dr. Richard Virr, Curator of Manuscripts, Department of Rare Books and Special Collections, McLennan Library, that the Department preserves a number of uncatalogued Venetian manuscripts. As a researcher I was gratified with the study and analysis of these new manuscripts which further increased my respect for McGill's as yet relatively unknown and uncatalogued collection of manuscripts.

To the three published Mormori manuscripts are now added seven referring to other members of the family. Among them one refers again to Emmanuel. The three published manuscripts have now been re-catalogued and are part of the Mormori family manuscripts. These manuscripts are followed by five referring to the activities of the Veneto-Cretan Cattaneo family; also by three referring to Donato Michieli, an army engineer, and finally by a "livello" (long term lease) executed in Candia in the late sixteenth century. With the exception of the introductory and closing sentences, which are in Latin, the rest of the texts are composed in Italian.

MORMORI FAMILY

The Mormori family referred to in ten documents (MS 687) came, originally, from Nafplion, in the Peloponnese. The first known Mormori was a wealthy landlord, whose first name was Emmanuel. He was married, in the late fifteenth century, to a lady from the powerful feudal family of Buas.⁶

Following the capture of the Venetian possessions in the Peloponnese by the Ottomans in November 1540, the Mormori fled Nafplion. Members of the family settled in the Ionian islands, along the Western coast of Greece, where they soon joined the local nobility; others settled in Venice, while another branch of the family moved to Crete. The Cretan Mormori distinguished themselves in many fields of social activity. Thus, a Marco Mormori, a notary in Candia, is mentioned in 1555; a Giovanni Mormori, "ingegniero", was killed in June 1571 during the siege of Ammochostos (Famagusta) by the Ottomans; an "Ioannes Marmorius cretensis" graduated from the University of Padua in 1581; Jacomo Mormori contributed financially to the Cretan participation in the battle of Lepanto and is mentioned in the manuscripts as commander of the "stradioti" stationed in Candia.⁷ Following his death he was succeeded in this position by his son Zorzi.⁸

The family continued to be mentioned in seventeenth century records from Crete and Venice. Following the occupation of Candia by the Ottomans in 1669, they became, once more, refugees.⁹ The McGill manuscripts also mention two previously unknown eighteenth century descendants of the family: "capitano" Zorzi Mormori, in 1718, and "sargente maggiore" Antonio Mormori, in 1730.

The documents are:

Ms 687/1. Vellum, 464x351 mm. One column, 18 lines. Ducal letter referring to Zorzi Mormori. Dated 1 June 1575. Doge Alvise Mocenigo I (1570-1577).

r. "Aloysius Mocenigo Dei Gratia Dux Venetiarum etc..../...Datae in N(ost)ro Ducali Palatio Die prima Junii, Indictione tertia, MDLXXV".

Registrations in Crete: 24 May 1576, 25 May 1576.

v. "Nobilibus et sap(ientibus) viris Jacobo Fuscarenno equiti Provisori g(e)n(er)ali ac Inquisitori in regno n(ost)ro Cretae nec v(ir)o Aloysio Justiniano Ducha et co(n)siliariis ac Paulo Cont(ari)no cap(itane)o Cretae et eorum suce(ssori)bus".

Note: "1575, del c(avalier) d(omino) Zorzi M(ormo)ri".

This Ducal letter informs Jacomo Foscarini, Provveditore Generale in Crete, Alvise Justiniano, Duke of Crete, and Paolo Contarini, Captain of Crete, about Zorzi Mormori's appointment as Commander of the "stradioti" stationed in the island. He succeeded, in the position, his father Jacomo Mormori, who had recently died. The Doge informs the Cretan authorities about Zorzi's distinguished record during the war against the Ottomans in 1570-71, and his subsequent reward with a "cattena d'oro di ducati cinquanta" and the title of cavaliere.

Ms 687/2. Vellum, 535 × 430 mm. One column, 22 lines. Ducal decree dated 20 June 1575, conferring upon Zorzi Mormori rewards for distinguished services during the war of 1570-71, against the Ottomans. Doge Alvise Mocenigo I (1570-1577). (Figure 2)

r. "Aloysius Mocenigo Dei Gratia Dux Venetiarum.../...Data in Nostro Ducali Palatio. Dia vigesima Iunii, Indictione tertia MDLXXV".

v. Initials I.F.O.T.h. and note: "del c(avalier) Zorzi M(ormo)ri 1575".

The decree mentions Zorzi Mormori's participation and achievements in the battles of Chimara, Soppoto, Margariti and Santa Maura (Leucas) on the Epirotan and Albanian coastline, as well as during the Ottoman landings in Corfu, where he took prisoner the Cretan renegade Hasan Baffi. The decree confers upon him the title of cavaliere along with the accompanying distinction of carrying the regalia attached to the title. He also receives a golden chain from the Doge.

Ms 687/3. Vellum, 402 × 257 mm. One column, 15 lines. Document issued by Filippo Pasqualigo "capitano di Candia" recognizing the contribution of Zorzi Mormori to the fight against the plague, in his capacity as "soprintendente alla sanita".¹⁰ Document issued in Candia. Dated 19 May 1594.

r. "Noi Filippo Pasqualigo per la ser(enissima) sig(no)ria di Venetia etc. Cap(itano) di Candia.../...Dato di Candia alli 19 di Maggio 1594. Filippo Pasqualigo Cap(itano). Nicolo Drasotto Canc(eliere) dell Ill(ustrissimo) S(ignor) Cap(itano) di Candia ...".

v. Note: "Del c(avalier) D(omino) Zorzi M(ormo)ri, 1594, No 73".

During or shortly before the plague epidemic which hit Crete from January 1592 to July 1594, Zorzi Mormori was named "soprintendente alla sanita" for the city of Candia. He had almost dictatorial authority, overseeing and directing all activities related to health conditions in the city of Candia. During the period referred to by the manuscript Zorzi Mormori suffered heavily. Indeed, he lost many members of his family, including four sons. Filippo Pasqualigo recognized Mormori's contribution and sacrifices and recommended him warmly to his successors.

Ms 687/4. Vellum, 576 × 357 mm. One column, 15 lines. Ducal letter issued on behalf of Zorzi Mormori. Dated 20 April 1611. Doge Leonardo Dona (1606-1612). (Figure 3)

r. "Leonardus Donato, Dei Gratia Dux Venetiarum etc.../...Data in N(ost)ro Ducali Palatio. Die XX Aprilis Indictione nona / MDCXI / Roberto Lio / Segretario".

v. "Del D(omino) Zorzi M(ormo)ri. Registrata nel libro di Ca(nce)ll(ar)ia dell M(assa)r(ia) del ragionato fiscal di Candia. 113. / Emanuel Mormori Cav(alier), 1611, No 29".

By 1611 Zorzi Mormori had been serving the Republic for over thirty years. In the Ducal letter he is referred to as Commander of the fortress of Suda in Western Crete. He is given an annual salary increase of 100 ducats, from 500 "servendo" and 400 "non servendo" to 600 "servendo" and 500 "non servendo". His house is referred to as "honoratissima casa".

The note on the verso referring to the registration of the letter carries the signature of "Emanuel Mormori cavalier".¹¹

Ms 687/5 (de Ricci 161). Vellum, 435 × 337 mm. One column, 9 lines. Ducal letter issued on behalf of Emmanuel Mormori. Dated 8 July 1583. Doge Nicolo Daponte (1578-1585). (Figure 4)

r. "Nicolaus Daponte Dei Gratia Dux Venetiarum etc.../Datae in Nostro Ducali Palatio, Die VIII Iulii, Indictioni XI, MDLXXXIII".

v. "Nobili et sapienti viro Aloysio / Grimano Provisorii Nostro Generali / in Nostro Regno Cretae."

The Ducal letter addressed to Alvise Grimani, Provveditore Generale in Crete,



Figure 2. Doge Alvise Mocenigo, 1570-1577. From Leone Matina, *Ducalis Regiae Lararium...* Padua, 1659.

mentions Colonel Emmanuel Mormori's appointment as Commander of the local Infantry units ("ordinanze"). He replaced Antonio Emiliani, from Ascoli, and was to receive an annual salary of 500 ducats.

Ms 687/6 (de Ricci 162). Vellum, 460 × 625 mm. One column, 30 lines. Ducal letter addressed to Emmanuel Mormori. Dated 3 July 1590. Doge Pasquale Cicogna (1585-1595).

r. "Nos Paschalis Ciconia, Dei Gratia, Dux Venetiarum, etc.../ Datae in Nostro Ducali Palatio Die IIIa Iulii, Indictione tertia, MDXC".

v. "Del C(avalier) Collonel Mormori"; "Del C(avalier) Emmanuel M(ormo)ri Collonel."

The letter is addressed to Emmanuel Mormori by Doge Pasquale Cicogna. It sets out his responsibilities during the operations against Alfonso Piccolomini, Lord of Montemarciano. Mormori was to act in close collaboration with the Venetian authorities in Chioza, Adri, Loreo, Rovigo and elsewhere. His task was to act according to circumstances and avoid any disastrous encounter with the rebel. Besides his own infantrymen Mormori's force was composed of Provveditore Grimani's ten "cappelletti", Captain Francesco Canuova's Infantry unit, Gregorio Detrico's fifty "cappelletti", Giulio Savorgnan's twenty light horsemen as well as by men put under his command by the Rectors of Chioza, Adri, Cavarzere and Loredo, who were described as bombard operators, militiamen or possessing other military skills. He was, furthermore, instructed to ask for any additional assistance he thought necessary. He was given liberty to take any necessary action required to prevent Piccolomini from entering Venetian held territory.¹²

Ms 687/7. Vellum, 476 × 355 mm. One column, 8 lines. Ducal letter issued on behalf of Emmanuel Mormori and addressed to Federico Nani, "Provveditore Generale" in Dalmatia. Dated 8 April 1591. Doge Pasquale Cicogna (1585-1595).

r. "Pascalis Ciconia Dei Gratia Dux Venetiarum etc.../ ...Data in Nostro Ducali Palatio, Die VIII Aprilis, Indictione quarta. MDLXXXI / Gio(vanni) Ba(tis)ta Padavin sec(retario)".

v. "Nobili et sapienti viro Federico / Nani, Provisori Generale in / Dalmatia".

Federico Nani is informed that he has to facilitate the transport by sea of a cavalry unit ("stradioti") dispatched from Dalmatia to Candia, as well as of the baggage of Emmanuel Mormori, who is also travelling to Candia.

The letter probably refers to Emmanuel Mormori's return trip to Crete, following his participation in the military operations against Alfonso Piccolomini, a period from the middle of June 1590 to the 16th of March 1591, when the rebel was executed in Florence.

Ms 687/8 (de Ricci 163). Vellum, 463 × 330 mm. One column, 7 lines. Ducal letter on behalf of Emmanuel Mormori. Dated 16 July 1592. Doge Pasquale Cicogna (1585-1595).

r. "Pascalis Ciconia, Dei Gratia Dux Venetiarum, etc.../ Datae in Nostro Ducali Palatio, Die XVI Iulii, Indictione V, MDLXXXII."

v. "Nobili et sapienti viro Ioanni / Mocenigo Provisori Nostro / Generali in Regno Cretae."

Pasquale Cicogna informs Giovanni Mocenigo, "Provveditore Generale" in Crete, that Emmanuel Mormori will be placed under his command. He is to employ him according to the needs. Mormori's annual salary amounts to six hundred ducats.

Ms 687/9. Vellum, 426 × 300 mm. One column, 10 lines. Ducal letter issued on behalf of Zorzi And. Mormori. Dated 28 May 1718. Doge Giovanni Corner II (1709-1722).

r. "Ioanis Cornelio Dei Gratia Dux Venetiarum) etc.../ ...Data in Nostro Ducali Palatio die vigesima octava maii indictioni undecima, anno MDCCXVIII".

v. no notes.

The letter refers to "capitano" Zorzi And. Mormori's posting as "capitano de battaglia" in one of the units formed in Treviso and preparing to move to the Levant. The document fixes his monthly salary at 40 ducats. Zorzi And. Mormori is designated as "di famiglia nobile e distinta".

Ms 687/10. Vellum, 446 × 307 mm. One column, 8 lines. Ducal letter issued on behalf of Antonio Mormori. Dated 18 July 1730.



**Figure 3. Doge Leonardo Dona, 1606-1612. From Leone Matina, Ducalis Regiae
Lararium...
Padua, 1659.**

Doge Alvise Mocenigo III (1722-1732).

r. "Aloysius Mocenigo Dei Gratia Dux Venetiarum etc..../...Datae in Nostro Ducali Palatio die decima octava Julii, Indictione octava. MDCCXXX".

Follow registration notes.

v. no notes.

The letter refers to the appointment of Antonio Mormori to the position of "Sargente Maggiore" in the Regiment of the city of Rovigo. Mormori is already serving there and he commands a Company of the same Regiment. He is described as an able and efficient officer. This had been proven during the tests and military games performed in Verona.

CATTANEO FAMILY

Manuscript 688/5 indicates that the Cattaneo family arrived in Crete with the first Venetian settlers. That mission (1210/11) was composed of 132 cavalieri and 48 sargenti. The "feudati" were given lands, houses and serfs (villani) attached to the land. Initially, the foreign, Italian speaking, nobility's relations with the indigenous Greek speaking one were tense. Soon, however, from the early thirteenth century, compromises, agreements and Venetian concessions, melted the ice which separated the two aristocracies. A "nobilitas Cretense" emerged, having common socio-economic and political interests.¹³ Characteristically, manuscript 688/3, dating from 1692, still refers to Pietro Cattaneo as "nobil Cretense".

The five McGill manuscripts (688) which refer to the Cattaneo family mention Giovanni Cattaneo's heroic deeds during the Ottoman-Venetian struggle for control of Crete (1645-1669). During the war he lost his five brothers. It appears, from the documents, that Giovanni was the most important member of the family.

The family was in fact distinguished not only for the martial feats of its members, but also for the literary and intellectual preoccupations of some of its scions. Manuscript 688/5 mentions Giovanni's son Tommaso professore...nell' Università nostra di Padova". Tommaso born in Corfu in 1660, received his doctorate in Philosophy and Theology from the Collegio

Romano. He next taught in Venice at the Collegio Greco Flangini; in 1686 the Senate offered him the Chair of Philosophy at the University of Padua. He taught there until 1710, when he returned to Venice. He died in 1725, leaving behind a strong reputation of scholarship and eloquence. His sons Giovanni and Pietro published his works posthumously (1736).¹⁴ Giovanni (1691?-1761) is best known as opponent of the Enlightenment. He attacked the scientific and philosophic culture of his century and defended Catholicism with passion. He was convinced that very soon the whole edifice of modern astronomy was going to collapse ("non passera gran tempo, che tutto il vano dell'astronomia moderna cadera"). It is true, however, that during the final period of Venetian independence Cattaneo's conservatism was widely emulated among his fellow citizens.

The documents are:

Ms 688/1. Vellum, 540 × 375 mm. One column, 15 lines. Ducal letter issued on behalf of Giovanni Cattaneo. Dated 10 March 1657. Doge Bertucci Valier (1656-1658).

r. "Bertuccius Valerio Dei Gratia Dux Venetiarum etc..../Data in / Nostro Ducali Palatio Die Decima Martii, Indictione Decima MDCLVII. / Ant(oni)o di Negri / Seg(reta)rio".

On top and on left margin registrations at Corfu, Zante and Cephalonia.

v. no notes.

The letter mentions the heroic acts performed by "il capitan" Giovanni Cattaneo during the siege of Canea, where he lost five brothers, and his participation in the operations against the Ottomans in the Dardanelles, Monemvasia, Tenedos and Lemnos.¹⁵ Giovanni's salary is fixed to 400 ducats annually.

Ms 688/2. Vellum, 400 × 290 mm. One column, 16 lines. Ducal letter issued on behalf of Giovanni Cattaneo. Dated 10 May 1692. Doge Francesco Morosini (1688-1694).

r. "Francescus Mavrogeno Dei Gratia Dux Venetiarum etc..../...Data in / N(ost)ro Ducali Palatio. Die decima Maii / Indictione decima quinta. MDCLXXXII".

v. no notes.



Figure 4. Doge Nicolò Daponte, 1578-1585. From Leone Matina, *Ducalis Regiae Lararium...* Padua, 1659.

This document mentions past services performed by "il Governator" Giovanni Cattaneo, during the war against the Ottomans. It also mentions the loss of his five brothers during the siege of Canea in 1645. Giovanni Cattaneo is now Governor of Bergamo. At the expiration of his term his annual salary will be fixed at 500 ducats.

Ms 688/3. Vellum, 463 × 355. One column, 19 lines. Ducal letter issued on behalf of Pietro Cattaneo, Giovanni's son. Dated 6 August 1692. Doge Francesco Morosini (1688-1694).

r. "Franciscus Maurogeno Dei Gratia Dux Venetiarum etc.... / Data in N(ost)ro Ducali Palatio. Die / sexta Augusti, Indictione Xma 5ta. MDCLXXXII / Felice Gallo Seg(reta)rio".

Followed by registration note.

v. no notes.

The document refers to the participation of "il capitan" Pietro Cattaneo "nobil Cretense" and son of Giovanni Cattaneo in the last war against the Ottomans. Again Giovanni's heroic deeds are mentioned and also, this time, his capture by the Turks. Pietro Cattaneo is named Commander for life of a Company of Corsican infantrymen.

Ms 688/4. Vellum, 463 × 325 mm. One column, 11 lines. Ducal letter issued on behalf of Bernardin Cattaneo, nephew of Giovanni Cattaneo. Dated 3 March 1729. Doge Alvise Mocenigo III (1722-1732).

r. "Aloysius Mocenigo Dei Gratia Dux Venetiarum etc.... / ...Data in Nostro Ducali Palatio die Tertia Martii Indictione Septima. MDCCXXIV".

Followed by registration notes.

v. Illegible note.

The document refers to Bernardin as the "unico in presente rimasto" descendant of the Cattaneo family. He is also the grand-son of Giovanni Cattaneo, whose deeds are again mentioned along with his brothers' deaths during the siege of Canea in 1645. The Great Council feels that it has to reward, in the person of Bernardin, the noble Veneto-Cretan family for what its members did for the Republic. Bernardin, who now receives a foot-soldier's pay, is to receive more, seven and a

half ducats monthly, until he reaches the grade of Company Captain.

Ms 688/5. Vellum, 470 × 340 mm. One column, 30 lines. Memorandum about the activities of various members of the Cattaneo family. Based on "Libri, Chroniche, Decretti et Ducali dell Eccel(entissi)mo Senato". Composed by Francesco Bonamino "Publicus Venetiae Notarius". Dated 30 August 1739.

r. "Punti pertinenti alla fammiglia Cataneo, nobile Feudatoria Cretense /...et sign(at) absque Reg(ist)ro".

v. no notes.

This document records the arrival of the family in Crete in 1210. The Cattaneos were among the first Venetian settlers and this is supported by official documents. Two branches of the family are mentioned. The one that remained in Venice died out after 1400. Of the surviving branch, Giovanni Cattaneo and his five brothers who were killed in Canea, are again mentioned. His son Pietro is also mentioned followed by an account of his achievements during the wars against the Ottomans in the late 17th and early 18th centuries. Tomaso Cattaneo, well known "professore...nell'Universita nostra di Padova", is mentioned next. He is Giovanni's son and Pietro's brother also.

MICHIELI FAMILY

The Michieli or Michiel family appeared early in Venetian history. Three Doges, who belonged to the family, are mentioned in the XIIth century: Vitale I (1096-1102), Domenico (1117-1129) and Vitale II (1156-1172).¹⁶ Among members of the family who were active in the Levant, are Giovanni, Venetian podesta in Constantinople in 1238, Domenico, active in Crete in 1355, Luca, provveditore in Crete in the 1570's, and Marino, who fought against the Ottomans in 1668 and 1687.

The Michieli manuscripts (689) reflect events of the 1684-1718 war against the Ottomans, during which Venice annexed the Peloponnese (Treaty of Carlowitz, January 1699) to lose it again to the Ottomans by the Treaty of Passarowitz (July 1718). During operations in the Peloponnese, Donato Michieli served as army engineer, being wounded seven times.

The documents are:

Ms 689/1. Vellum, 670 × 405 mm. One column, 14 lines. Ducal letter referring to Donato Michieli. Dated 26 March 1692. Doge Francesco Morosini (1688-1694). (Figure 5)

r. "Francescus Mauroceno Dei Gra(tia) Dux Venetiarum etc./...Data in Nostro Ducali Palatio. Dia vigesima sexta Martii, Indictione Xma / 5ta. MDCLXXXII. / Felice Gallo seg(retario).

Followed by registration note: 28 August 1692.

v. Note: "No 3".

Doge Morosini expresses his satisfaction with Donato Michieli's contribution to the war effort in 1690. Michieli, an army engineer, had received a monthly salary of 40 ducats. An increase is now decreed and his new monthly salary will reach 50 ducats.

Ms 689/2. Vellum, 390 × 290 mm. One column, 20 lines. Ducal letter referring to Donato Michieli. Dated 28 June 1704. Doge Alvise Mocenigo II (1700-1709).

r. "Aloysius Mocenigo, Dei Gratia Dux Venetiarum, etc..../ Data in Nostro Ducali Palatio. Die vigesima octava Iunii, Indictione XIIo, MDCCIII".

Followed by registration note: 12 July 1704.

v. "S. Collo(nelo) Dona Michieli".

This Ducal letter cites Michieli's accomplishments during the last war against the Ottomans. He served the Republic well and even carries, on his body, seven scars from wounds he received in the battles in which he participated in the Peloponnese. He has been given as a reward, the command for life of an army company stationed in the Venetian Terra Ferma. Michieli, however, wants to serve in Dalmatia and leave the command of his company to his son Angelo, who, in turn, will receive a Captain's salary, his father having offered to serve in Dalmatia as a volunteer. His request is accepted and confirmed by the Ducal letter.

Ms 689/3. Vellum, 425 × 300 mm. One column, 22 lines. Ducal letter referring to Donato Michieli. Dated 23 May 1715. Doge Giovanni Corner II (1709-1722).

r. "Ioannes Cornelio, Dei Gratia, Dux Venetiarum, etc..../ Data in Nostro Ducali

Palatio. Die vigesima tertia Maii, Indictione 8a. MDCCXV".

v. no notes.

By the year 1715 Donato Michieli had been serving in the army corps of engineers for thirty years. He had reached the rank of Lieutenant Colonel and had served the Republic faithfully, constantly providing proof of his skills. At the time of the letter, Michieli was serving in the Lagoon area, he was "Luogotenente Maggior" of Lido where he distinguished himself in finding ways to carry on efficiently his military and engineering duties. He was congratulated by the Doge.

A "Livello".

Ms 690. Vellum, 332 × 400 mm. One column, 48 lines. First nine lines imperfect. Long term lease (Livello) contract between Zuan-Battista Pasqualigo, his brothers and Giacomo d'Artona, from Candia, for the amount of 52 ducats annually. Document composed by George Dafnomili, Notary. Dated 10 February 1589.

r. "In Christi Gloriosissimi Nomini Amen. Anno (n)ativitatis eiusdem Milles(si)mo quinqu(essi)mo ottog(essi)mo nono .../... Georgius Dafnomili (Pu)b(li)cus Notarius manu p(ro)p(ri)a scripsit".

v. "1589, 10 Feb(ruari)o. Liv(ellari)o fatto .../... per ducati 52 all'anno".

The document provides a list of property to be leased by the absentee Pasqualigo landlords to Giacomo d'Artona from Candia, for the annual amount of 52 ducats, with all the legal terms and conditions attached, in accordance with the law. The terms of the lease are written by the Candiotote notary George Dafnomili, and witnessed by four persons. The lease refers to sections of three fiefs: one situated in the district of "castel nuovo", the second designated under the name of Fam(a)chia and the third under that of Giofirachia.

Venice was present in Crete for more than four and a half centuries, that is from 1204 until 1669. Its influence was pervasive and in many respects, especially cultural ones, positive. In fact the Venetian connection brought the island into the mainstream of European Renaissance. On a more practical scale the Republic clung to Crete, thus defending its

own geopolitical interests, with a tenacity being, at times, close to ruthlessness. The documents, catalogued and described here, reflect that presence and influence and contribute, in this capacity, to the long history of Venetian presence in the Levant and to its struggle against the Ottomans.

* * * * *

Notes

Acknowledgement: I wish to express my gratitude to Dr. Richard Virr, Curator of Manuscripts, Department of Rare Books and Special Collections, McLennan Library, for bringing these manuscripts to my attention; for making them available to me; for showing a spirit of collegiality; and for being most helpful throughout.

1. S. Borsari, *Il dominio veneziano a Creta nel XIII secolo* (Naples, 1963), 12-13.

2. I. G. Giannopoulos, 'Η Κρήτη κατά τον τέταρτο βενετοτουρκικό πόλεμο (1570-1571) (Athens, 1978), 25, 257.

3. E. Thiriet, *La Romanie vénitienne au moyen-âge* (Paris 1975), 205-206.

4. D. Bernicolas-Hatzopoulos, "Emmanuel Mormori and the Alfonso Piccolomini Incident", *Thesaurismata*, vol. 19 (1982), 90-101.

5. de Ricci, S.—Wilson, W.J., *Census of Medieval and Renaissance Manuscripts in the United States and Canada* (New York, 1935-1940), vol. 2, 2220-2221, nos 161, 162, 163.

6. E. Liatas, "Μνείες θανάτων Ἑλλήνων τῆς Βενετίας ἀπό τὰ ταμιακά βιβλία τῆς ἐλληνικῆς Ἀδελφότητος τῶν ἐτῶν 1536-1576," *Thesaurismata*, vol. 11 (1974), 221, no. 80.

7. The "stradioti", from the Greek word for soldier, formed lightly armed cavalry units. They were young men of Greek and Albanian origin. For centuries they were the backbone of the Venetian armies fighting in the Levant against the Ottomans. See: D. Nicol, *Byzantium and Venice: A study in Diplomatic and Cultural Relations*, (Cambridge, 1988), 417; and, in A. Vacalopoulos, 'Ιστορία του νέου ἑλληνισμοῦ, (Thessaloniki, 1968), vol. 3, 5-6, 26-31, where the nature and importance of the "stradioti" are examined extensively.

8. For information on the Mormori family see: I. K. Chasiotes, Οἱ Ἕλληνες στὶς παραμονές τῆς ναυμαχίας τῆς Ναυπάκτου ὙΕκκλήσεις ἐπαναστατικές κινήσεις καὶ ἐξεγέρσεις στὴν ἐλληνική χερσόνησο ἀπὸ τὶς παραμονές ὡς τὸ τέλος τοῦ

κυπριακού πολέμου. Also, D.B.Hatzopoulos, 94-101, especially on Emmanuel Mormori.

9. S. Antoniadis, "Οικονομική κατάσταση τῶν πόλεων τῆς Κρήτης κατά τὴν ἐποχὴ τοῦ πολέμου 1645-1669. Συναλλαγές τοῦ Γεωργίου Μόρμορη," *Thesaurismata*, vol. 4 (1967), 38-52.

10. On the measures taken by the Venetian authorities on health issues, especially during plague epidemics, see: G. Lotter, "L'organizzazione sanitaria a Venezia", *Venezia e la peste, 1348/1797* (Venice, 1979), 99-102.

11. Emmanuel Mormori is also referred to as Zorzi's brother. See: M. Lambrynidis, 'Η Ναυπλία ἀπὸ τῶν ἀρχαιοτάτων χρόνων μέχρι τῶν καθ' ἡμᾶς (Athens, 1898), 98.

12. On the Alfonso Piccolomini rebellion see: D.B. Hatzopoulos, 98-99.

13. S. Xanthoudides, 'Η Ἐνετοκρατία ἐν Κρήτῃ καὶ οἱ κατά τῶν Ἐνετῶν ἀγῶνες τῶν Κρητῶν (Athens, 1939), 8, 129-130; Borsari, 38-39, 77.

14. *Opere postume di Tommaso Cataneo*. Venezia: Giambattista Albrizzi q. Girol., 1736.

15. Canea was besieged by the Ottomans from June 24, 1645 to August 22, 1645, when it surrendered. See S. Romanin, *Storia documentata di Venezia* (Venice, 1855-1861), vol. 7, 359-364. The Straits, Monemvasia, Tenedos and Lemnos operations were conducted by the Venetians during the Venetian-Ottoman war, 1645-1669.

16. There seems to be, however, considerable uncertainty among authors concerning the exact dates of administration of early Venetian Doges.

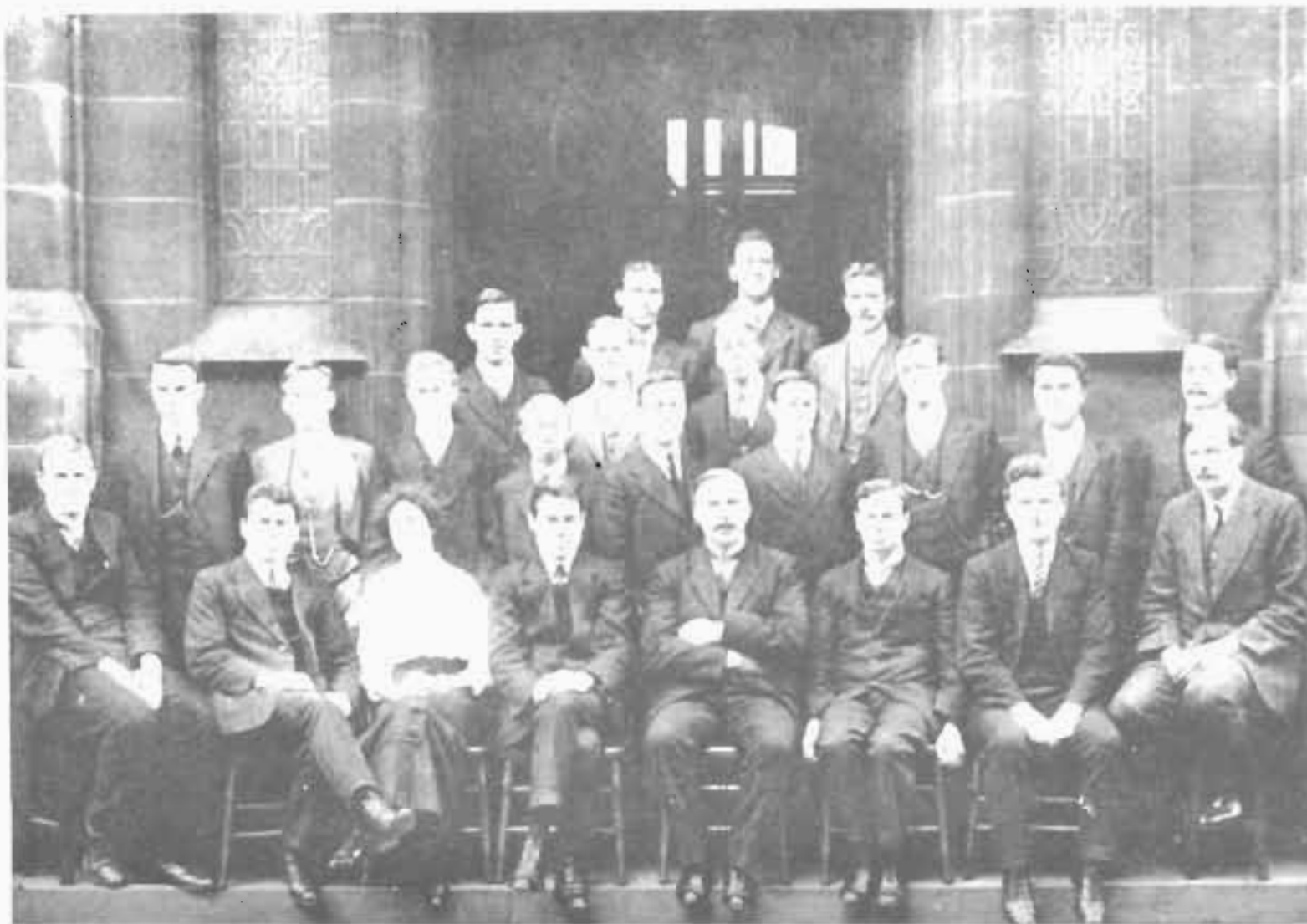
My Dear Eve ..., The Letters of Ernest Rutherford to Arthur Eve Part III, 1912-1914

by Montague Cohen

In Parts I and II of this article, annotated transcripts were presented of the first 15 of a set of hitherto unknown letters from Ernest Rutherford in Manchester to Arthur Eve in Montreal. These 15 letters were written in the years 1907-11. This part contains a further 13 letters, plus two postcards, written between 1912 and 1914. These letters are interleaved with annotated extracts and summaries of 10 letters from Eve to Rutherford written in the same period; these letters are part of the Cambridge University collection. The period covered by this article saw important developments in the study of radioactivity and the atom, in particular: (i) experimental evidence supporting Rutherford's 1911 nuclear atom, together with the development by Niels Bohr (1913) of a sound theoretical basis for the Rutherford atom; (ii) the discovery of X-ray diffraction by von Laue in 1912 provided a means of measuring X-ray wavelengths and hence of studying the electron configurations of different elements. Much of this work was carried out by Rutherford's team in Manchester and is featured in this article. The scientific aspects of the correspondence are mixed with items of a personal or general nature, including Rutherford's knighthood (1914), Eve's promotion to a Macdonald Professorship at McGill (1913), the tragic death of the wife of Howard Barnes, Director of Physics at McGill (1912) and the loss of the Empress of Ireland in the St. Lawrence River (1914).

Les première et deuxième parties de cet article présentaient des exemplaires annotés des 15 premières lettres jusque là inédites qu'Ernest Rutherford à Manchester avait adressées à Arthur Eve à Montréal. Ces 15 lettres ont été écrites entre 1907 et 1911. Cette partie comprend 13 lettres supplémentaires et deux cartes postales écrites entre 1912 et 1914. Elles sont émaillées d'extraits annotés et de résumés des six lettres d'Eve à Rutherford écrites pendant la même période; celles-ci font partie de la collection de l'Université de Cambridge. La période étudiée dans cet article est marquée par deux percées importantes dans l'étude de la radioactivité et de l'atome, en particulier: i) les preuves expérimentales étayant l'hypothèse formulée par Rutherford en 1911 sur l'atome nucléaire ainsi que l'élaboration d'une solide base théorique pour l'atome de Rutherford par Niels Bohr (1913); ii) la découverte de la diffraction des rayons-X par von Laue en 1912 qui a fourni le moyen de mesurer les longueurs d'ondes des rayons-X et donc d'étudier la configuration des électrons de différents éléments. Plusieurs de ces travaux ont été menés par l'équipe de Rutherford à Manchester et sont abordés dans cet article. Les aspects scientifiques de la correspondance se mêlent à des renseignements généraux ou intimes dont l'élevation de Rutherford au titre de chevalier (1914), la nomination d'Eve à une chaire Macdonald à McGill (1913), le décès tragique de l'épouse de Howard Barnes, directeur du département de physique de McGill (1912) et le naufrage de l'Empress of Ireland dans le fleuve St-Laurent (1914).

* * * * *



My Dear Eve ... The barrier of Ernest Rutherford to Arthur Eve.

Figure 1. Group photograph of staff and research students of the Physics Department of Manchester University, 1913. (Courtesy Manchester University)

The two previous parts of this article¹ presented the first 15 of 37 hitherto unknown letters from Ernest Rutherford to his friend and former colleague Arthur S. Eve at McGill University. These letters, which are not listed in the *Rutherford Correspondence Catalog*,² were recently discovered among other documents and letters at McGill. Part I of the article covered the period 1907-08, i.e. the first 18 months of Rutherford's Manchester period. Part II covered 1909-11, and the present article takes the story to the middle of 1914, just before the outbreak of World War One.

This article includes annotated transcripts of 13 letters, plus two postcards, written by Rutherford between March 1912 and June 1914 (Table 1 and Figures 3 and 4). As in the previous articles, the letters written *by* Rutherford are interleaved with annotated extracts and summaries of Eve's letters *to* Rutherford in the same period. The latter have long been in the public domain and are part of the Rutherford Collection in the Library of Cambridge University. These letters are therefore not reproduced in full, but the extracts (published by permission of the Syndics of the Cambridge Library) are intended to place the Rutherford letters in the context of a two-way correspondence. It must be admitted, however, that this aim is only partially realized since there are obvious gaps where letters either did not exist or (more probably) have been lost.

The arrangement of letters in this article is indicated in Table 1. There is a gap of over a year between letter R-15 written by Rutherford on 14 June 1911 (see Part II) and R-18 written on 25 June 1912, broken only by two postcards (R-16 and R-17) sent from France in March-April 1912. A further gap of 5 months occurs between R-19 (16 August 1912) and R-20 (10 January 1913). On Eve's side, there are gaps of 4 months between E-21 and E-22 and 5 months between E-23 and E-24. Most significant of all is a gap of 13 months between E-26 (19 January 1913) and E-27 (27 February 1914).

Of these gaps in the present series, it seems that only the last (January 1913–February

1914) can be attributed to the loss of several letters in a row. In the other cases the lack of correspondence can be attributed to the absence of Rutherford from Manchester on business or vacation, although the loss of one or two letters cannot be ruled out. It must be borne in mind (as was pointed out in the previous parts of this article) that the Rutherford–Eve correspondence was essentially of a *personal* rather than a professional nature, i.e. neither side needed or used the correspondence as a means of furthering his research. A gap in the exchange therefore had little or no implication for the work in hand at Manchester or McGill. This is in marked contrast to the Rutherford–Boltwood correspondence³ which (apart from a great deal of gossip) includes some valuable scientific exchanges between the physicist (Rutherford) and the chemist (Boltwood).

The letters of Rutherford in this period were all typewritten, with occasional corrections and additions by hand. An example is shown in Figure 5. Eve's letters, however, were all written by hand and are often difficult to read; an example is given in Figure 6.

Ernest Rutherford, 1912-14

The period covered by this article was a very important one from the point of view of both Rutherford personally and physical science in general. By 1912 Rutherford had been at Manchester over four years and had built up an impressive team of scientists and graduate students, a team which included Niels Bohr, Hans Geiger, Henry Moseley, Ernest Marsden, Edward da Costa Andrade and others who became famous in their own right. A group photograph of the Manchester team, taken in 1913, is shown in Figure 1. The output of this team is indicated in Table II, which enumerates the papers published by the Manchester group in the years 1907 to 1919. (The figures for 1907 are given in parentheses because Rutherford spent only part of that year in Manchester.) It is seen that the output of papers reached a peak in 1912-14 with an average of 42 per year. (The number of *authors* is considerably higher since the majority of papers had more than one author.) This was for a group which numbered no more than 24

at any time, including both staff and graduate students, down to the most junior graduate. After 1914 the output declined rapidly, as the department was depleted by the war. Most, but not all, of the papers were concerned with radioactivity, radiations (including X rays), the interaction of radiation with matter and the structure of the atom, topics of personal interest to Rutherford. However, it is not true, as has sometimes been alleged, that Rutherford did not permit his colleagues and students to work on problems outside his personal interests. A complete bibliography is given in *Rutherford at Manchester*, ed. J. B. Birks (1962).⁴

Table II indicates that Rutherford's personal output of papers, alone or in co-authorship, actually declined after reaching a peak in 1908-09. Several reasons for this can be suggested. Firstly, as the research activities of the department increased, Rutherford needed to spend more and more time talking to and advising his assistants and students. (It is noteworthy that—at least in his Manchester period—Rutherford did not co-author a paper unless he himself had participated in the experimental work; suggesting and guiding an investigation did not imply authorship.) Secondly, the preparation of the book *Radioactive Substances and their Radiations*,⁵ published early in 1913, must have taken up a significant proportion of Rutherford's time in 1911 and 1912. Thirdly—and there is evidence that this was an important factor—the period 1910-14 saw the emergence of two cornerstones of modern science: the nuclear atom (discussed below) and X-ray diffraction (see Note 3 of letter R-20). Rutherford was directly involved in the former and indirectly in the latter since the newly-discovered phenomenon had profound implications for the study of radiation and the structure of matter. At any rate, this was a period in which Rutherford devoted much of his time to thinking in his study rather than experimenting in the laboratory.

An important event in the period under review was Rutherford's knighthood on January 1, 1914. This is covered briefly—almost casually—in the present correspondence. Clearly Rutherford's attitude to the hon-

our was ambivalent: he was pleased and flattered but, at the same time, somewhat uneasy that he had accepted a distinction that went against his democratic outlook.

Arthur Eve, 1912-14

At the beginning of the period covered by this article Arthur Eve was an Associate Professor of Mathematics at McGill, although he worked mainly in the Physics Building. The Director of Physics was Howard Barnes, who had succeeded John Cox in this post in 1910. The correspondence in the present article opens with a letter from Eve in which he reports the tragic and unexpected death of Mrs. Barnes, shortly after giving birth to twin daughters. Thereafter a recurrent theme in the correspondence is Barnes' emotional health and his desire to resign his McGill post and make a fresh start elsewhere. In the event Barnes did *not* leave during the period of this article but eventually (1918) resigned because of a nervous breakdown.

In June 1912 Harold A. Wilson, who had been appointed Macdonald Professor of Physics in 1909 in succession to Rutherford, resigned in order to take up a post in Houston, Texas. An important theme of Eve's letters in 1912-13 was his desire to obtain the appointment while confessing some doubt as to his ability to fill the post adequately: "As to the vacant chair I think the University would like to appoint a Really Great Man. If they cannot, they may appoint me... I could never hope to fill a chair occupied previously either by yourself or H. A. Wilson." Rutherford's views on the post were equivocal: while clearly wishing to help his friend if possible, he comes close to saying that he does not consider Eve the right man for the post. Eventually, after a year's delay, Eve was appointed.

A photographic portrait of Eve is shown in Figure 2. The precise date of this photograph is unknown, but is believed to be in or near the period of this article.

Highlights of the Correspondence

Among the many topics discussed in the present correspondence attention may be drawn to the following:



Figure 2. Arthur Stewart Eve. (The precise date of this photograph is unknown but is believed to be within or near the period of this article.)

- A meeting of the International Radium Standards Committee in Paris in March 1913 in which radium standards prepared in Paris and Vienna were measured and compared. Eve was a member of the Committee but did not attend. Rutherford played a prominent (but not dominant) role in the proceedings. Mme Curie attended for part of the time.
- The celebrations in July 1912, of the 250th anniversary of the founding of the Royal Society of London.
- Publication in 1913 of Rutherford's book *Radioactive Substances and their Radiations* and its "review" by Eve.
- The variation with altitude of ionization in the atmosphere, work (mainly in Germany) which led to the discovery of cosmic radiation.
- The energy and intensity of the β -rays emitted by radium and its decay products.
- The relationship between α , β and γ radiations.
- X-ray diffraction by crystals and the use of the technique to determine the wavelength of X- and γ -rays. This topic led to a discussion of the nature of X-rays.
- Moseley's investigations on the "high frequency" (i.e. X-ray) spectra of the elements.
- Development by Geiger (1913) of a modified version of his particle counter.
- A controversy as to the origin of the formula for "black body" radiation.
- Lectures by Rutherford at the Royal Institution, London (1913), the National Academy of Sciences, Washington (1914) and McGill University Physical Society (1914).
- The sudden death of Mrs. Barnes, wife of the Director of Physics at McGill, after giving birth to twin daughters in January 1912, and the subsequent indecision of Barnes as to his career at McGill.
- The long-delayed promotion of Eve at McGill following the resignation (1912) of the Macdonald Professor of Physics, Harold A. Wilson.
- Local Montreal news included a severe water shortage following the collapse of an

inlet pipe in the municipal water plant (December 1913), a spectacular fire in old Montreal (January 1914) and the sinking of the liner *Empress of Ireland* in the St. Lawrence River with the loss of almost 1,000 lives (May 1914).

- Most important of all, the further development of the nuclear model of the atom. This is discussed below.

The Nuclear Atom, 1904-14

The nuclear atom is pictured as a miniature solar system, with an extremely small but massive nucleus in the centre and a number of electrons revolving in orbits around the nucleus. The nucleus is positively charged and contains nearly all the mass of the atom; the electrons are negatively charged but have only a very small mass compared with that of the nucleus. The number of orbital electrons varies from element to element but always equals the positive charge on the nucleus, so that the atom as a whole is electrically neutral. The model indicates that the atom is mostly empty space and a rapidly moving particle can pass right through the atom without hindrance; occasionally, however, the particle will pass close enough to the nucleus to experience a massive force arising from the electric field of the nucleus and the particle (if electrically charged) will then be deflected (scattered) from its path.

The nuclear atom, as just depicted, was born in 1911 when Ernest Rutherford published a paper titled "The scattering of alpha and beta particles by matter and the structure of the atom."⁶ However, the birth was preceded by an extended antenatal period. In 1904 a Japanese scientist, H. Nagaoka, proposed a model of the atom comprising a number of electrons of equal mass arranged uniformly in a ring and a positively charged sphere of large mass at the centre of the ring.⁷ The model was called *Saturnian* by analogy with the rings of the planet Saturn. Nagaoka's atom aroused very little interest at the time; however, in his 1913 book⁸ Rutherford formally acknowledged Nagaoka's work. The first hint of the scattering of α -particles by matter came in 1906, when Rutherford was still at McGill. He noticed that the photographic

image of a fine beam of α -particles was rendered slightly diffuse when the beam passed through air rather than a vacuum, or through a thin sheet of mica⁹. Rutherford did not follow up this observation in Montreal, but later, in Manchester, he suggested to Geiger that a full investigation of the angle of scatter was needed, using different scattering materials. Geiger, and a young graduate student, Ernest Marsden, published three papers on this topic in 1908-10.¹⁰ It was these experiments that demonstrated that a small fraction of the α -particles are reflected back in their direction of origin. The observation—usually referred to as the gold leaf experiment—was the crucial factor that convinced Rutherford that the atom must contain a very small but massive nucleus. The formal birth of the nuclear atom¹¹ followed in 1911.

Rutherford's 1911 paper aroused surprisingly little interest in the scientific community. Even Rutherford himself, in *Radioactive Substances and their Radiations*, discussed the nuclear atom only briefly, although the scattering of α -particles by a nuclear atom is given fairly full treatment.¹² The general verdict was that the nuclear atom was unrealistic because—according to classical mechanics—orbiting electric charges (electrons) would radiate energy and rapidly spiral into the nucleus. However, by 1914 the situation had changed radically. This change was brought about by two factors. Firstly, in 1913 Niels Bohr published three papers "On the Constitution of Atoms and Molecules,"¹³ in which he married Rutherford's atom to Planck's quantum theory, thereby stabilizing the electrons in certain fixed orbits and circumventing the objections of the classical physicists. Secondly, further important evidence in favour of the nuclear atom was provided in Rutherford's laboratory (see below).

Niels Bohr (1885-1962) was a young Danish theoretical physicist who had spent 6 months in Cambridge (1911-12) working under J. J. Thomson and then 4 months with Rutherford in Manchester (March–July 1912). Bohr wrote his "nuclear" paper (in three parts) in Denmark during the latter half of 1912 but sent it to Rutherford for criticism and submission to the *Philosophical Magazine*. For a suc-

cinct account of the interaction of Bohr and Rutherford prior to the publication of the latter's papers, see del Regato, *Radiological Physicists*,¹⁴ especially Chapter 7. Subsequently Bohr spent a further two years (1914-16) with Rutherford as lecturer in Manchester University. A good biography of Bohr is that of Ruth Moore.¹⁵ Bohr's own reminiscences of Rutherford were published in 1962 as a chapter in *Rutherford at Manchester*.¹⁶ However, Bohr is nowhere mentioned by name in the correspondence in this article.

The additional experimental evidence on the nuclear atom took the form of investigations on the collision of α -particles with hydrogen and other light atoms. This work was carried out in Rutherford's laboratory by Charles Darwin (grandson of the author of *Origin of Species*) and Ernest Marsden.¹⁷ As a result, in 1914 Rutherford was able to publish his second basic paper on the atom,¹⁸ in which he stated that he would now discuss certain aspects of the "nucleus atom" which he had "deliberately omitted" in his 1911 paper.¹⁹ The modern nuclear atom was now firmly established.

Introduction Notes

1. Montague Cohen, "My Dear Eve..., The Letters of Ernest Rutherford to Arthur Eve, 1907-1908," *Fontanus* 1 (1988), 3-37; and "My Dear Eve..., The Letters of Ernest Rutherford to Arthur Eve, Part II, 1909-1911," *Fontanus* 2 (1989), 111-138.
2. Lawrence Badash, *Rutherford Correspondence Catalog* (New York; American Institute of Physics, 1974).
3. Lawrence Badash, *Rutherford and Boltwood; Letters on Radioactivity* (New Haven: Yale University Press, 1969).
4. J.B. Birks, ed., *Rutherford at Manchester* (London: Heywood and Co, 1962).
5. Ernest Rutherford, *Radioactive Substances and their Radiations* (Cambridge: Cambridge University Press, 1913).

6. Ernest Rutherford, "Scattering of Alpha and Beta Particles by Matter and the Structure of the Atom," *Phil. Mag.*, Ser. 6, 22 (1911), 621-29.
7. H. Nagaoka, "Kinetics of a System of Particles illustrating the Line and the Band Spectra and the Phenomena of Radioactivity," *Phil. Mag.*, Ser. 6, 7 (1904), 445-55. This paper was also published in *Proc. Tokyo Mathematico-Physical Soc.*, Ser. 2, 2 (1904), 92-107.
8. Rutherford, *Radioactive Substances*, 620.
9. Ernest Rutherford, "Some Properties of the Alpha Rays from Radium" (Second Paper), *Phil. Mag.*, Ser. 6, 11 (1906), 166-76; and "Retardation of the Alpha Particle from Radium in passing through Matter," *Phil. Mag.*, Ser. 6, 2 (1906), 134-46.
10. Hans Geiger, "On the Scattering of the Alpha Particles by Matter," *Proc. Roy. Soc.* A81 (1908), 174-77; Hans Geiger and Ernest Marsden, "On a Diffuse Reflection of Alpha Particles," *Proc. Roy. Soc.* A82 (1909), 495-500; and Hans Geiger, "The Scattering of Alpha Particles by Matter," *Proc. Roy. Soc.* A83 (1910), 492-504.
11. See note 6.
12. Rutherford, *Radioactive Substances*, 180-86 and 616-20.
13. Niels Bohr, "On the Constitution of Atoms and Molecules," *Phil. Mag.*, Ser. 6, 26 (1913), 1-25 (Part I), 475-502 (Part II), 857-75 (Part III).
14. J. A. del Regato, *Radiological Physicists* (New York: American Institute of Physics, 1985).
15. Ruth Moore, *Niels Bohr: The Man, His Science, and the World they Changed*. (New York, Alfred A. Knoff, 1966).
16. Niels Bohr, "Reminiscences of the founder of Nuclear Science and of some Developments based on his Work," in *Rutherford at Manchester* (note 5 above), 114-167.
17. Charles G. Darwin, "Collision of α -Particles with Light Atom," *Phil. Mag.*, Ser. 6, 27 (1914), 499-506; and Ernest Marsden,

"The Passage of α -Particles through Hydrogen," *Phil. Mag.*, Ser. 6, 27 (1914), 824-30.

18. Ernest Rutherford, "The Structure of the Atom," *Phil. Mag.*, Ser. 6, 27 (1914), 488-98.

19. See note 6.

Bibliography

In addition to the bibliographic material listed above, specifically Notes 2-4 and 14-16, the following publications are relevant to this article and have been consulted in the preparation of the explanatory notes:

Andrade, Edward N. da Costa. *Rutherford and the Nature of the Atom*. New York: Doubleday, 1964.

Eve, Arthur S. *Rutherford. Being the Life and Letters of the Rt. Hon. Lord Rutherford, O.M.* Cambridge, Cambridge University Press, 1939.

Feather, Norman. *Some Episodes in the α -Particle Story, 1903-1977* in *Rutherford and Physics at the Turn of the Century*, ed. Mario Bunge and William R. Shea. New York: Dawson and Science History Publications, 1979 (pp. 79-88).

Webster, Robert L. *Pioneers of Science. Nobel Prize Winners in Physics*, ed. J. M. A. Lenihan. Bristol: The Institute of Physics, 1980.

Wilson, David. *Rutherford, Simple Genius*. Cambridge, Mass.: MIT Press, 1983.

My Dear Eve... The Letters of Ernest Rutherford to Arthur Eve

TABLE I
The Rutherford-Eve Correspondence
Part III: 1912-1914

Rutherford to Eve		Eve to Rutherford	
R-16	28 March 1912*	E-21	28 January 1912
R-17	5 April 1912*		
R-18	25 June 1912	E-22	4 June 1912
R-19	16 August 1912	E-23	15 July 1912
		E-24	11 December 1912
		E-25	16 December 1912
R-20	10 January 1913		
R-21	19 February 1913	E-26	19 January 1913
R-22	5 March 1913		
R-23	31 March 1913		
R-24	3 June 1913		
R-25	15 December 1913		
R-26	19 January 1914		
R-27	17 February 1914		
		E-27	27 February 1914
		E-28	1 March 1914
R-28	14 March 1914		
		E-29	18 May 1914
		E-30	3 June 1914
R-29	4 June 1914		
R-30	15 June 1914		

* Postcard

E-21 Eve to Rutherford

McGill University, Montreal
The Macdonald Physics Building
28 January 1912

This short letter, written after an interval of almost three months since letter E-20 (1 November 1911), is devoted entirely to the sudden death of Mrs. Barnes, the wife of Eve's colleague Dr. Howard Barnes.¹ "She was

recovering well from the birth of her twin daughters three weeks previously, and the doctors thought that danger was over. But she suddenly fainted in bed and never recovered consciousness. Dr. Barnes was with her at the time, and the moment before she had been well and happy. The doctors suppose it was a clot of blood stopped the valves of the heart. The funeral (private) was this morning. It is scarcely possible to conceive of a more deplor-

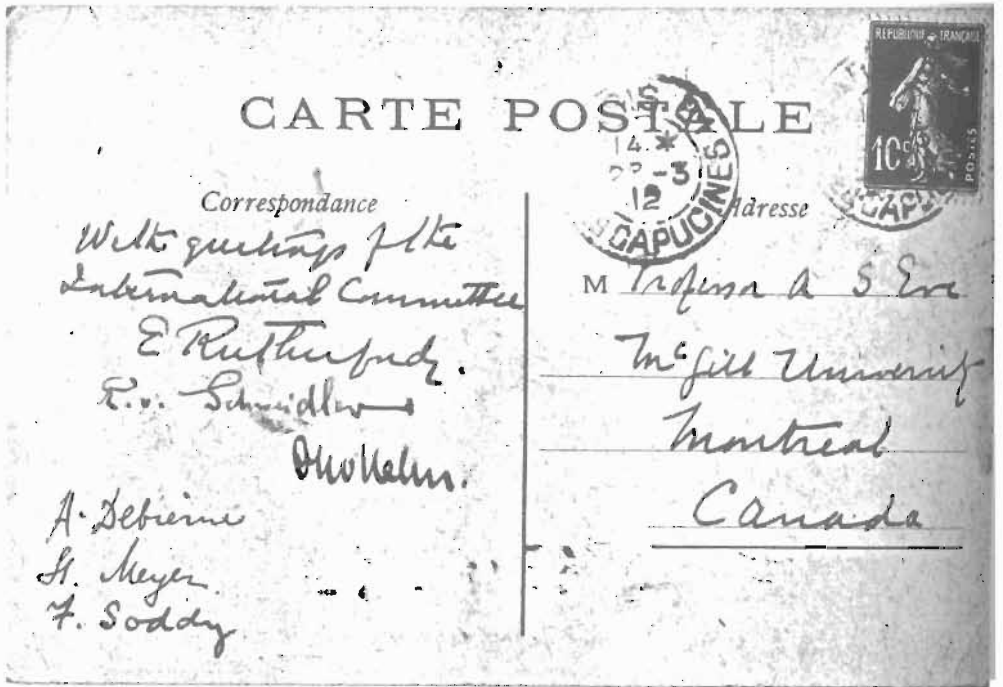


Figure 3. Postcard sent to Eve from Paris (March 1912) and signed by members of the International Radium Standards Committee (see letter R-16).

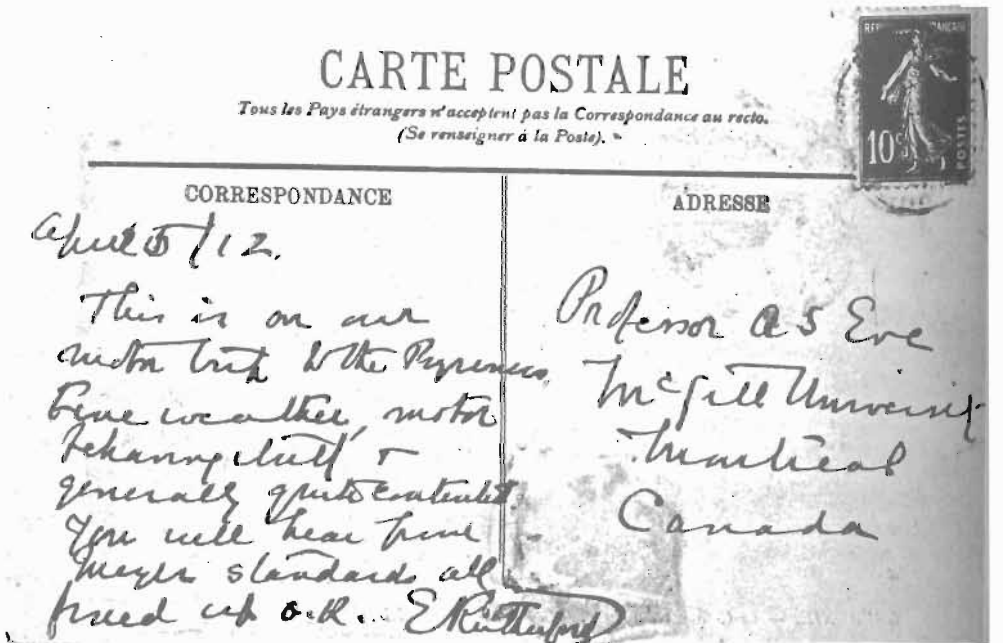


Figure 4. Postcard from Rutherford to Eve, mailed in the French Pyrenees, April 1912 (see letter R-17).

TABLE II

Papers Published by Rutherford and his Colleagues
and Students at Manchester University, 1907-1919*

Year	Rutherford alone	Rutherford with co- author(s)	Other authors	Total
1907	(10)	(0)	(3)	(13)
1908	5	10	16	31
1909	8	8	23	39
1910	5	2	23	30
1911	6	3	30	39
1912	5	3	34	42
1913	3**	9	31	43
1914	3	4	34	41
1915	6	1	18	25
1916	1	1	9	11
1917	1	0	7	8
1918	1	0	3	4
1919	6	1	0	7

* Data derived from the Bibliography in J. B. Birks (ed.), *Rutherford at Manchester* (1962).

** Plus book

able loss, both for poor Barnes, the two boys and those baby twins."

E-21 Notes

1. Howard Turner Barnes (1873-1950) was Macdonald Professor of Physics at McGill and (since 1910) Director of the Physics Laboratories (see Note 8 of letter R-9 in Part II.) According to J. S. Foster, who wrote the obituary of Barnes in *Obituary Notices of Fellows of the Royal Society*, 8 (November 1952), 25-35, the tragic death of his wife, combined with the excessive burden of work resulting from the loss of staff in World War I, led to a serious nervous breakdown in 1917. Norman Shaw makes a similar statement in an obituary of Barnes published in the *Proceedings of the Royal Society of Canada*, 45 (1951), 77-81. There is a 9-year gap in Barnes' publications, from 1917 to 1926, by which time he had recovered sufficiently to resume scientific

work as an Emeritus Professor. The evidence of Barnes' letters to Rutherford in 1912 (6 are preserved in the Cambridge collection) is equivocal. On the one hand the letters give little hint of an *imminent* nervous collapse. On the other hand several of these letters indicate a disenchantment with teaching and a desire for a change, which was no doubt only one symptom of the severe stress which eventually led to a breakdown. Thus, on November 25, 1912, Barnes wrote, with reference to his work on icing in the Gulf of St. Lawrence: "I expect to get substantial help from the Government sufficient to make me independent of teaching work. Whether I continue on here will depend on what arrangements I can make with the University." Two weeks later (December 12, 1912) he wrote: "I feel now sadly lacking in authority and power, even my teaching is done badly and unless I can get a better grip on things I feel for the best interests of the University that I must get out."

R-16 Rutherford to Eve (Figure 3)

This postcard, dated March 28, 1912 was mailed in Paris and signed by six members of the International Radium Standards Committee,¹ viz: Ernest Rutherford (U.K.), Egon von Schweidler (Austria), André Debierne (France), Stefan Meyer (Austria), Otto Hahn (Germany) and Frederick Soddy (U.K.). Mme Curie was present for part of the meeting of the Committee but did not sign the card. (The postmark *Capucines* refers to *Boulevard des Capucines* in the heart of Paris.)

R-17 Rutherford to Eve (Figure 4)

The text of this postcard, dated April 5, 1912, reads:

This is on our motor trip to the Pyrenees. Fine weather, motor behaving itself and generally quite contented.² You will hear from Meyer standards all lined up O.K.

E. Rutherford

(The photograph on the reverse side of the card is of the mountains near Gavarnie, not far from the Spanish border.)

R-16/17 Notes

1. The International Radium Standards Committee was set up in September 1910 under the joint Chairmanship of Rutherford and Mme Curie (see Note 3 of letter R-11). One of the tasks of the Committee was to arrange for the preparation of one or more radium sources which could be designated as international standards. By 1912 suitable sources, each containing a known mass of radium, had been prepared in Paris (by Mme Curie) and in Vienna (at the Institut für Radiumforschung.) A meeting of the International Committee was therefore called for the purpose of comparing the strengths of the Paris and Vienna sources by measuring the intensity of the γ -rays emitted by each source. (The γ -intensity should be proportional to the mass of radium in the source, after making certain corrections.) The experimental comparison was made by two different methods. The first involved an ionization chamber and a "piezo-electric" electrometer developed originally by Pierre Curie. The other method utilized a technique described by Rutherford and J. Chadwick: "A

Balance Method for Comparison of Quantities of Radium and some of its Applications," *Proc. Phys. Soc.*, 24 (1912), 141-51.

In a letter to Bertram Boltwood (the U.S. member of the Committee who was unable to attend the Paris meeting), written prior to the meeting on March 18, Rutherford said: "I have not much doubt but that the two standards will be found in very good agreement, but it will be a devil of a mess if they are not. That is one of the reasons I must be there to act as arbitrator between the two parties." (Badash, *Rutherford and Boltwood*, 264.) In the event, the Paris and Vienna standards agreed within the limits of error of the measurements, about 1 part in 300—hence Rutherford's statement in postcard R-17 "You will hear from Meyer standards all lined up O.K.," Stefan Meyer (Director of the Institut für Radiumforschung in Vienna) being the Secretary of the International Committee.

It was decided to deposit the Paris source in the Bureau International des Poids et Mesures as the primary world standard, while the Vienna source (actually one of three Austrian sources measured at the meeting) was to be held in the Radium Institute in Vienna as a reserve standard.

In a post-meeting letter to Boltwood (22 April 1912), Rutherford commented as follows: "The meeting passed off very pleasantly and without any friction. Debierne [Mme Curie's colleague] had made excellent arrangements for the apparatus for testing, and proved himself a very sensible person. We all had lunch with Mme Curie and her family. She looks rather feeble and ill, but no worse than she did at Brussels two years ago. We held a short meeting in her house and then retired to the Laboratory to make the final arrangements, with which she was quite satisfied. I think we perhaps got through matters very much quicker without Mme Curie, for you know she is inclined to raise difficulties." (*Ibid.*, 270) A full account of the meeting and its results was published in *Nature* by Soddy in an unsigned article: "The International Radium Standard," *Nature*, 89 (April 4, 1912), 115-16.

2. In his letter to Boltwood prior to the meeting, Rutherford wrote: "I leave Paris on the

following Thursday morning [March 28] and go to Havre, where I am to meet my wife, the chauffeur and the motor, and also Professor [W.H.] Bragg, who is coming with us. We then intend to make a beeline for the South of France, skirt along the Pyrenees and return homewards, a distance in all of 1,800 miles in a little over three weeks... I am pretty well tired out and want a holiday with no cares or worries, although I anticipate plenty of a mechanical kind." (Badash, *Rutherford and Boltwood*, 264). Evidently the "mechanical worries" did not materialize since Rutherford's letter to Boltwood after returning home (22 April 1912) speaks of a "thoroughly pleasant time, with three weeks' sunshine marred occasionally by cold wind" but makes no mention of any automobile breakdown (*ibid.*, 269.)

E-22 Eve to Rutherford

McGill University, Montreal
The Macdonald Physics Building
4 June 1912

The main purpose of this letter is to send Rutherford the half-yearly interest (\$62.50) due on June 1st, in respect of the mortgage taken by Eve a year earlier when he purchased from Rutherford some land near Montreal.¹

Eve mentions that he and his family will be spending July and August at Porter's place at Guysborough in Nova Scotia.² He goes on to state that H. A. Wilson will marry Miss Paterson Smythe in July and will move to the new University at Houston, Texas in September.³ "It is a great loss to us, as he is a very sound and learned physicist, and I like him. Whether or not he is wise to make the change is an open question, on which opinions differ."

Eve notes that "I am fooling with X-rays and finding some interesting points, but nothing of the first magnitude."⁴

Eve expresses the hope that "your motor journey through France to the Pyrenees was a golden holiday for you and Mrs. Rutherford;"⁵ also "I hear that Barnes and Cunliffe⁶ were with you at the same time."

E-22 Notes

1. The land in question had been acquired by Rutherford in 1906 for the purpose of building a house, but Rutherford left Montreal before the plan could be carried out. The purchase arrangements included a 20-year mortgage for \$2,500 at 5%, granted by Rutherford to Eve. See also Note 4 of letter E-16 in Part II of this article.

2. J. Bonsall Porter was Macdonald Professor of Mining Engineering at McGill University. Guysborough is on the coast of Nova Scotia, about 200 km east of Halifax.

3. Harold A. Wilson was Macdonald Professor of Physics at McGill from 1909 to 1912, when he was appointed Professor of Physics at the Rice Institute in Houston, Texas. See Note 8 of letter R-9 in Part II.

4. Eve's "fooling with X-rays" led to the publication of two papers in 1912: A. S. Eve and F. H. Day, "On the Absorption of Röntgen Rays in Air," *Phil. Mag.* Ser. 6, 23 (April 1912), 683-688; and A. S. Eve, "A Comparison of the Ionization within Closed Vessels due to Röntgen and Gamma Rays," *Phil. Mag.* Ser. 6, 24 (September 1912), 432-36.

5. See letter (postcard) R-17 and Figure 2. This card was written two months earlier and had almost certainly been received by Eve, together with the postcard from Paris written on March 28, before he composed his letter on June 2. It is strange, therefore, that Eve did not acknowledge receipt of either message. Furthermore, Rutherford's trip to the Pyrenees followed the meeting in Paris of the International Radium Commission which Eve was unable to attend (see Note 2 of R-17), yet he does not mention the meeting in this letter. The most likely explanation is that a letter (or letters) from Eve to Rutherford written in the period February-May 1912 has been lost.

6. Barnes: see Note 8 of letter R-9 in Part II and Note 1 of letter E-21. Cunliffe: John Williams Cunliffe had been a Lecturer/Associate Professor at McGill from 1899 to 1907, when he moved to Columbia University. (Barnes' wife was Annie Kershaw Cunliffe, but I have been unable to determine the relationship, if any, between Annie and John Cunliffe.)

R-18 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
June 25, 1912

My Dear Eve,

I beg to acknowledge the receipt of a draft from the Bank of Montreal for £12. 16. 9. in payment of half yearly interest on your mortgage due on June 1st, 1912.

I was interested to hear from H. A. Wilson of his decision to go to Texas, and also to get married. Of course I quite understood the last few years that for a number of reasons Barnes and he have not pulled together very well. I understand that Wilson's post is a good one, but I would not like personally to go to such a hot place. I was not able to see Barnes before he left or I would have discussed the matter with him. I presume that you personally would have no objection to be a candidate, but I have no idea what the University proposes to do in the matter. I hope to see Peterson at the Universities Congress¹ and to enquire about the matter.

We have just finished our Examinations, and finish up with Degree Day at the end of the week. The summer is filled with Congresses of various kinds, including the Universities Congress next week, then the Royal Society Celebration² followed by the Mathematical Congress at Cambridge³ and the B. A. meeting⁴ not to mention the Eugenics Congress⁵ thrown in.

I have got a lot of work in progress and hope to get some of it done. As you know Geiger is leaving us at the end of the summer to go to the Reichsenstalt.⁶ We shall miss him very much. I am fortunate, however, in having a number of good men at this stage, and hope to do something definite with them.

I think my general idea of the atom, which I published a year ago, is being rapidly verified.⁷ I have now not the least doubt that most of the mass of the atom is concentrated throughout an exceedingly small volume.

I have now got on to the last chapter of my book and shall be very thankful when it is through.⁸ We are all a little bit under the

weather at present, which has been fairly hot and close, and Eileen is in bed with a bilious attack, but otherwise there is not much to complain of.

I shall be glad to hear how things are progressing with you, and hope you are all in good health.

With kind regards,

Yours very sincerely,
E. Rutherford

R-18 Notes

1. The Congress of the Universities of the Empire took place in London, July 2-5, 1912, with the participation of more than 50 universities. McGill was represented by the Chancellor, Lord Strathcona, and the Principal, Dr. Peterson, both of whom appear to have played prominent roles in the proceedings. However, the extensive reports of the Congress in the *London Times* make no mention of Rutherford's participation; nor does Rutherford refer to the Congress in subsequent letters such as those of August 15 to Boltwood (Badash, *Rutherford and Boltwood*, 275) and August 16 to Eve (R-19 in this article.) Nevertheless, in the present letter Rutherford indicates his intention of attending the Congress and, in his next letter to Eve (R-19) confirms that he has seen Peterson "when he was in England."

2. To celebrate the 250th anniversary of its foundation, the Royal Society of London organized a number of events, including a reception in the Society's rooms in Burlington House, London (July 15, 1912), a service at Westminster Abbey (July 16) and a banquet in the Guildhall (July 16). The celebrations were attended by about 300 delegates from Britain, the Dominions and other countries. Canada was represented by Dr. Peterson, Principal of McGill University. However, the *Times* did not include Rutherford in the list of guests, which is strange in view of the fact that Rutherford was not only a Fellow of the Society but a recipient of the Society's Rumford Medal in 1904 and a Nobel Laureate (1908).

3. The International Congress of Mathematicians was held in Cambridge,

August 22-27, 1912 but there is no indication that Rutherford attended even a part of the meeting.

4. The annual meeting of the British Association for the Advancement of Science took place in Dundee, Scotland, commencing September 5, 1912. The Presidential address in Section A (Physical Science) was given by Prof. H. L. Callendar (Rutherford's predecessor at McGill) on the nature of heat. Rutherford and an assistant, Mr. H. Robinson, gave a paper on the heating effect of emanation and its products.

5. The International Eugenics Conference was held at London University, July 24-30, 1912, but there is no indication that Rutherford participated in any way.

6. *Reichsenstalt* refers to the Physikalisch-Technische Reichsanstalt in Berlin (the spelling error is Rutherford's.) Hans Geiger was appointed Director of the Laboratory for Radium Research (see Note 5 of letter R-9 in Part II for further details.)

7. Rutherford published his new theory of the structure of the atom—the now-familiar nuclear atom—in the May 1911 issue of *Phil. Mag.* (see Note 6 of letter R-13 in Part II and “The Nuclear Atom, 1904-14” in the Introduction to this article.) The “verification” to which Rutherford refers rested mainly on careful experimental work on the scattering of α -particles by matter through large angles. These measurements were made by Geiger and Marsden and published in April 1913: H. Geiger and E. Marsden, “The Laws of Deflexion of Particles Through Large Angles,” *Phil. Mag.* Ser. 6, 25 (1913), 604-23. This was followed, in July 1913, by the paper of Neils Bohr (at that time working with Rutherford in Manchester) which gave the “Rutherford” atom a sound theoretical basis in quantum physics and thereby firmly established the “Rutherford-Bohr” nuclear atom: N. Bohr, “The Constitution of Atoms and Molecules,” *Phil. Mag.* Ser. 6, 26 (1913), 1-25.

8. “My book” refers to the third edition of *Radioactivity*, first published in 1904. However, the book eventually appeared under a new title *Radioactive Substances and their Radiations* and was essentially a new work. See

subsequent correspondence in this article, especially letter E-25, also Note 7 of letters E-18/19/20 in Part II.

E-23 Eve to Rutherford

Long Beach Lodge
Guysborough, Nova Scotia
15 July 1912

Eve thanks Rutherford for his letter (R-18) which “has followed me here.” He praises “Porter's charming place” and comments “It is my first experience of Nova Scotia and it is a beautiful country—in summer.”

Eve expects that the new edition of Rutherford's book “will be a great help to all. Mme Curie's book¹ is useful but the fatal omission of an index spoils it.”

The main topic of the letter is the vacant Chair of Physics at McGill University:² “As to the vacant chair I think that the University would like to catch a Really Great Man. If they cannot, they may appoint me. I quite concur with this view. I would not like to see them appoint a man who was just about my equal. However, I am conscious that both physically³ and intellectually I could never hope to *fill* a chair occupied previously either by yourself or H. A. Wilson.⁴ I think that the Governors will be guided much by your view, and you need not worry about me, as I shall be perfectly happy whether I do or do not get the post. My present biller⁵ is a very satisfactory one, and the honour of promotion to your chair would give me the greatest pleasure.”

Eve concluded the letter with a comment on his vacation activities: “My wife walked about 8 miles and fished most of yesterday with me. Last week I lost a 10 lb salmon, after an hour's acquaintance, for want of a gaff.⁶ I had light trout tackle and a small net.”

E-23 Notes

1. Marie Curie, *Traité de radioactivité* (Paris: Gauthier-Villars, 1910, 2 v.) See also letter R-13, especially Note 8, in Part II.

2. The vacant chair was the Macdonald Professorship in Physics occupied by Rutherford from 1898 to 1907 and subse-

quently by H. A. Wilson, who was due to take up a new appointment in Texas in September 1912 (see letter E-22). At this time Eve's official position was that of Associate Professor of *Mathematics*, even though his work was entirely within the field of physics. It should also be stressed that there were *two* Macdonald Professors of Physics, one of whom (H. T. Barnes) was also Director of the Physics Building. (Physics was not yet dignified with the status of "department.") Eve was therefore seeking promotion but at this stage did not aspire to direct the physics program.

3. The significance of Eve's use of the work "physically" is not clear. It could perhaps refer to the fact that Eve was older than both Rutherford and Wilson.

4. See Note 2 above.

5. *Billet* is used here to mean "appointment" or "situation."

6. *Gaff*: a barbed fishing-spear or stick with an iron hook for landing large fish.

point of view, but I certainly derived great benefit from such a course, and I trust the University did likewise.

I had a visit to-day from W. Heap Holland of Fairmount, British Columbia, who has a ranch in British Columbia, and has on it some hot springs which he thinks may turn out to be of commercial value. As a preliminary, he wants the activity of the waters examined,³ and I referred him to you as the man nearer the spot. His people live near here, and he informs me that he is a nephew of Lord Rotherham. Notwithstanding that he seems a thoroughly good fellow and has commercial interests in Manchester as well as in Canada. He tells me he knows Adami, who lives in his neighbourhood.⁴ I referred him to you as I thought you might possibly think it worth while to keep in touch with radio-active examination of waters etc. in Canada.

We are going on a holiday tomorrow and I am just trying to push work through.

Yours ever,
E. Rutherford

R-19 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
August 16, 1912

My dear Eve,

I received your letter some time ago re Montreal matters. I quite understand your position, which I think is very reasonable and sensible. I saw Peterson when he was in England, and I gathered from him that no definite move will be made in the question of a successor for some little time.¹ We naturally spoke of your claims, and Peterson obviously is quite sound on that point. I am not sure, however, whether ultimately it might not be better for you in any case to retain your present position,² which I presume will ultimately be as good as a Professorship of Physics. I do not know of anyone at the moment who I think is big enough to fill the post. It seems to me from the point of view of McGill's best interest that it may be worth their while to catch a young fellow of promise and appoint him on a much lower salary than Wilson, and look after him if he develops. I may be prejudiced on this

R-19 Notes

1. Rutherford is replying to Eve's letter of 15 July 1912 (E-23). The matter in question is the Macdonald Professorship of Physics vacated by H. A. Wilson (see Note 2 of E-23) and earlier held by Rutherford himself. Rutherford's information was correct: the post remained unfilled through the 1912-13 academic year. Eventually Eve was appointed: see Note 5 of letter E-24 below.

2. As stated in Note 2 of letter E-23, at the time Eve's official position at McGill was that of an Associate Professor of *mathematics*, although most of his work was in the domain of physics. Rutherford's statement that "I do not know anyone ... who ... is big enough to fill the post" is a tactful way of saying "I do not think that *you* are big enough for the post."

3. At the time, and indeed well into the 1960s, radioactivity was considered a *desirable* feature of the spring water found in many health spas. At the time also, scientists in many countries, including Canada, were busy measuring the low levels of radioactivity found

in ocean and lake waters as well as in rocks and other naturally occurring substances. Eve was well placed to help Rutherford's visitor in his quest.

4. John George Adami was Professor of Pathology and Bacteriology at McGill. He had held this post since 1892, i.e., throughout Rutherford's tenure at McGill, and the two men clearly knew each other. (A letter from Adami to Rutherford, dated 11 January 1912, is preserved in the Cambridge collection.) However, the statement that Adami "lives in his neighbourhood" is a puzzle. Presumably the "neighbourhood" refers to Fairmount, British Columbia, but there is no evidence that Adami either lived in B.C. or had an association with that province. A posthumous tribute to Adami, with contributions from his widow, friends and colleagues (Marie Adami, "J. George Adami: a Memoir," London: Constable, 1930) gives no hint of a link with British Columbia. It is probable, therefore, that Rutherford misunderstood his visitor and that the association was in England rather than Canada. Adami hailed from Liverpool (and eventually retired there) and it is possible that Adami's family in Northwest England, between Manchester and Liverpool, was known to Holland's family in the same area.

E-24 Eve to Rutherford

McGill University, Montreal
The Macdonald Physics Building
11 Dec 1912

Eve begins by thanking Rutherford "for the goodly pile of papers bearing witness to the tireless energy of yourself and your Laboratory." He then comments on the work of two German scientists: "Laue's work is very interesting and suggests an electromagnetic explanation of X-rays.¹ How do they ionize?"² and "The extra radiation which Hess³ got, strongly marked, at 4000 meters is a puzzler. If real, it more than accounts for the discrepancy with altitude."⁴

Eve then refers to his own position at McGill: "I am sending a letter to Peterson⁵ asking him to define my position, if possible, before 1st February. If they do not promote me now, they never will, and I have no intention

of vegetating, and I have enough means to risk throwing myself on the wide wide world, if they turn me down. Naturally I would rather not."

With regards to his on-going research, Eve writes that he is trying to settle up a few points on penetrating radiation, and "the evidence is pretty good already."⁶ In general "Everything is going quietly and well in the Physics Building." However, Eve hastens to add that "Men are overburdened with teaching, coaching and demonstrating and it decreases the output of research work. I think the above have more than doubled since you left us."⁷

E-24 Notes

1. Max von Laue (1879-1960) was the discoverer of X-ray diffraction, i.e., the "reflection" of X-rays by the atoms in a regular crystal structure, analogous to the diffraction of light by a grating. In 1909 von Laue became a *Privatdozent* at the Institute for Theoretical Physics of the University of Munich. In the spring of 1912 he conceived the idea of sending a narrow beam of x-rays through a crystal of zinc sulphide; the result was an array of dark points on a photographic plate behind the crystal, each point corresponding to the diffraction of the rays by regularly spaced atoms in the crystal. In May 1912 von Laue, together with assistants Walter Friedrich and Paul Knipping, announced their success in a letter to the Bavarian Academy of Sciences. Von Laue was awarded the Nobel Prize in Physics in 1914. The discovery of X-ray diffraction was important in two ways: firstly, it confirmed the wave nature of X-rays, i.e., X-rays are electromagnetic radiation similar to light but of a shorter wavelength, an unproven (and controversial) assumption before 1912; secondly, it proved that crystals are regular arrays of atoms and opened up a powerful new technique for the study of these structures.

2. *How do they ionize?* Eve's question was pertinent. Ionization is the process whereby neutral atoms of matter are converted into pairs of positively and negatively charged particles (ions). It was assumed at the time that ionization was brought about by direct collisions between moving particles and atoms, such that the more massive the particle the

greater the effect. On this basis an electromagnetic wave, which has no mass at all, ought not to ionize. However, in 1900 Planck had postulated the discrete (quantum) nature of radiation and in 1905 Einstein had used Planck's theory to explain the emission of electrons from a metal surface by light (the photoelectric effect.) It remained to apply quantum theory to the interaction of X-rays with matter and to show that most of the ionization observed with X- and γ -rays is *indirect*, i.e., the initial interaction processes result in relatively few moving particles, each of which, however, has sufficient energy to generate a large number of ions.

3. In 1910 Victor Franz Hess (1883-1964) became an assistant to Stefan Meyer at the newly founded Institute for Radium Research in Vienna. In the period 1919-38 he was professor of physics at the Universities of Vienna, Graz and Innsbruck. He left Austria following the Nazi occupation in 1938 and was appointed professor of physics at Fordham University in New York. Hess received the Nobel Prize in physics in 1936 for his discovery of cosmic radiation (see Note 4 below).

4. In 1910 Theodor Wulf found (in measurements at the Eiffel Tower) that the ionization of the atmosphere at 300 m above a γ -ray source is greater than at 300 horizontal meters. He suggested that extraterrestrial sources were responsible for this effect. In 1911 Hess took up the problem and (with the aid of the Austrian Aeroclub) made ten daring balloon ascents to collect data, reaching a height of 5350 m. Hess found that the ionization of air decreased up to about 150 m, but increased at greater heights, such that the radiation at 5,000 meters was several times that at sea level. Furthermore, at all levels the radiation was the same night or day and the altitude effect could therefore not be due to direct radiation from the sun. The name "cosmic radiation" was suggested by R. A. Millikan in 1925.

5. Williams Peterson was Principal (also Professor of Classics) of McGill University (see Note 7 of letter R-9). In the event, Eve did not carry out his threat to throw himself "on the wide wide world" since he was appointed Macdonald Professor of Physics in 1913, although the effective date of the appointment

is not stated in the McGill Annual Report for 1912-13. (See also Note 2 of E-23 above.)

6. *Penetrating radiation* means X- and γ -rays. However, apart from the two papers already published in 1912 before this letter was written (see Note 4 of E-22 above), Eve did not publish this work.

7. It is difficult to substantiate Eve's statement from the statistics given in the McGill annual reports for the period. According to these data, the total enrolment of undergraduate students in the downtown campus increased from 969 in 1906-7 to 1104 in 1911-12, a gain of 14 percent. In the Faculties of Applied Science and Arts the gains were somewhat larger, 21% (374 \rightarrow 453), and 24% (257 \rightarrow 319) respectively. However, the enrolment in Medicine remained stationary: 338 \rightarrow 332. On the other hand, it is possible that the teaching load per member of the staff was not directly linked to the student enrolment.

E-25 Eve to Rutherford

McGill University, Montreal
The Macdonald Physics Building
16 Dec 1912

This letter is concerned entirely with Rutherford's new book *Radioactive Substances and their Radiations*,¹ an advance copy of which Eve has just received. Eve begins by thanking Rutherford for "your much appreciated gift... All my spare time yesterday I was reading, and dipping into it eagerly."

Eve's general appraisal of the book is as follows: "It is awfully well done and I congratulate you on it. You have been quite liberal to the old pioneers, and not allowed their often difficult labours to be obliterated by the latest determination. This adds to the charm of the book, as you can see the flower opening all the way from the bud. It seems to me remarkably free from all misprints and errors, although by the way *coconut* has nothing to do with *cocoa* beans (see Murray's Dictⁿ). But perhaps *cocunut* is almost permitted by usage.² Your references to my work are so frequent that I have a feeling that your heart was working with your brain. It is astonishing that so young a subject is so rapidly approaching a more or less

final form, by which I mean that the next steps forward are likely to be either speculative or attained with extreme toil.⁵ I wish we could get some hint as to how the energy got into the uranium atom, and how it is tipped out."⁴

Eve concludes with a paean of praise for Rutherford, comprising an astonishing mixture of metaphors: "This book is a monument to your work; for the work of your pupils is so largely yours, and we know it. Unless you had been at the helm or in the crow's nest, the whole ship would have littered the seas in chaos. I should like to know what sort of comic opera of a subject, and what wild notations, we should have had without you."

E-25 Notes

1. E. Rutherford, *Radioactive Substances and their Radiations* (Cambridge University Press, 1913), 699. This book was actually the 3rd edition of Rutherford's 1904 book *Radioactivity* but (as stated in E-18/19/20 Note 7) a change in title was decided upon in order to avoid difficulties relating to translation rights.

2. The reference to *coconut* refers to section 138 (pp. 378-80) of the book, in which Rutherford notes that "charcoal and notably cocoa-nut charcoal is a strong absorbent of the emanations of radium and thorium." The section discusses the mechanism and applications of the phenomenon, for example to determine the amount of radium emanation in the atmosphere, a topic of particular interest to Eve: A. S. Eve, "On the amount of radium emanation in the atmosphere near the earth's surface," *Phil. Mag.* Ser. 6, 16 (1908), 622-32. Eve's implied criticism of Rutherford's spelling of *cocoa-nut* is only partly justified. *Murray's Dict^y* refers to *A New English Dictionary on Historical Principles* (in 10 volumes) edited by James A. H. Murray (Oxford: Clarendon Press, 1888-1933), subsequently known as the *Oxford English Dictionary*. Volume II, published in 1893, gives *coco* as the preferred spelling of the Indian nut, with *cocoa* as a corruption of *cacao*, the seed of *Theobroma Cacao*, a tropical American tree. The dictionary notes: "The word [cocoa] was originally of 3 syllables, *ca-ca-o*, *co-co-a*, but the error of spelling *coco* as *cocoa* has led to the further corruption of pronouncing *cocoa* as *coco*." It is safe to assume that

Rutherford understood the difference between the *coco-* (or *cocoa-*) *nut* and the *cacao bean*.

3. Eve's statement that the subject of radioactivity is "so rapidly approaching a more or less final form" might be considered as optimistic in view of the fact that the neutron and the neutrino had not yet been discovered, the concepts of atomic number and isotopes not yet developed and artificial (induced) radioactivity not yet demonstrated. However, the validity of Eve's statement turns on the meaning of "the subject of radioactivity." Badash has argued that, in terms of the chemical identification of the elements in the natural decay series, and the nature of the transitions between them, the problem was indeed solved by the early 1920s. Badash speaks of the "suicidal success of radiochemistry" in the years before 1920. As a result the subject virtually did not exist in the 1920s but was resurrected in the mid-1930s (following the discovery of artificial radioactivity) as nuclear chemistry, while radio-physics became nuclear physics. See: Lawrence Badash, "The Suicidal Success of Radiochemistry," *Brit. J. Hist. of Science*, 12 (1979), 245-56. The concept of a given chemical element occurring in different forms with different atomic weights was put forward virtually simultaneously by Kasimir Fajans and Frederick Soddy: K. Fajans, "Die Stellung der Radioelemente in Periodischen System," *Physikalische Zeitschrift*, 14 (1913), 136-42; F. Soddy, "The radio-elements and the periodic law," *Chemical News*, 107 (28 Feb. 1913), 97-9. The name *isotopes* for this phenomenon was suggested by Soddy in December, 1913: F. Soddy, "Intra-atomic charge," *Nature* (4 Dec. 1913), 400. For a discussion of the contributions of Fajans, Soddy and others to the concept of isotopes, see the paper by Badash cited above.

4. Although the equivalence of mass and energy had been enunciated by Einstein as far back as 1905 (the famous equation $E=mc^2$) the principle had not so far been applied to radioactivity. It was not yet realized that a radioactive transformation involves a small loss in mass (i.e. the total mass of the daughter atom and the ejected particle is less than that of the parent atom) and it is this "missing"

mass which provides the energy needed to eject the particle. In his 1913 book (written in 1911-12) Rutherford refers (p. 618) only to J. J. Thomson's theory that "an atom consisting of a large number of revolving electrons may radiate energy extremely slowly, and yet, finally, this minute but continuous drain of energy from the atom must result either in a rearrangement of its component parts into a new system, or in an expulsion of electrons ... from the atom."

R-20 Rutherford to Eve

Private and Confidential*
17 Wilmslow Road
Withington, Manchester
Jan. 10th, 1913

My Dear Eve

I enclose herewith a formal receipt for the draft you sent me from Montreal, which I ought to have sent earlier.

Please give our thanks to Mrs. Eve for sending the fine photograph of your girl. It is a very excellent picture.

I have just returned from a holiday on the Riviera, where we had a very pleasant and quiet time with plenty of sunshine. I received while there your letter about my book. I am glad you have a good opinion about it, and value very much your kind remarks. It was a heavy task getting it through and I am very glad to have it off my hands. I have now got rid of a good many meetings etc., like the Royal Society and the University Council, and will have more leisure for my own work this year.

You will see by a letter in "Nature" of Chadwick and Russell¹ that we are pushing on with the production of γ rays by α rays. I think I told you that I am analysing the radiation from radioactive substances, and think I shall be able to put the matter into good shape, and show the connection with β rays. It will take, however, a good deal of experimental work before I am in a position to say very much.² The question of the crystal photographs of the X-rays is very interesting, and there seems to

be no doubt that young Bragg's explanation that the spots are obtained by reflection from crystal layers, is satisfactory.³ As you say, the important question is whether the rays ionise. C. T. R. Wilson has tried it by his method and says they do not.⁴ One of my men, Moseley, is examining the question by a very delicate method, and should soon be in a position to settle definitely the problem.⁵

I have heard nothing very definite about what is to be done about the Physical Department in Montreal. Barnes occasionally writes to me and is apparently not very certain of his own plans. I can well appreciate the conditions of the Department have changed a good deal since my departure. The number of students has increased so much that obviously a large amount of the energy of the teachers has to go in lectures and demonstrating. I was interested to hear that you have asked Peterson to regularise your position. From what you told me some time ago, I presume that you are content either to go on with the more Mathematical side or to switch over entirely to the Physical side. I do not know what are Peterson's views on the question; but between ourselves I think he appreciates that it is rather difficult to fit in people with Barnes. He was certainly very annoyed at the departure of H. A. Wilson, and was inclined to blame Barnes a good deal for it. On the other hand, I gathered from Barnes' letters to me that he is rather wavering whether to go with the professorial work or to take up work with the Government.⁶ If he were to decide to give up his professorial work it would, of course, greatly simplify the situation. It would then be possible to consider the whole matter afresh and decide upon the best course of action to pursue independent of personal considerations. In such a case, it would seem to me desirable to appoint a somewhat senior man as Director, and as a second man some young fellow of promise whose position could be improved as he showed his worth. As far as I can see, it is no very light task running the show at present, and there will want to be a great deal of teaching power if there is to be much leisure for individuals in research. From my conversation with Peterson I am quite sure that he understands your position and will take your claims into his consideration.

I shall be glad to hear from you how things develop. I do not like writing to Peterson about the matter until he writes definitely to me, and I do not know whether he will do so.

I am glad to hear that your family is progressing well. Give my kind regards to Mrs. Eve, and I wish you all a happy New Year.

Yours very sincerely,
E. Rutherford

PS How is Gray⁷ doing? He writes to me occasionally.

* Added by hand.

R-20 Notes

1. J. Chadwick and A. S. Russell, "Excitation of γ Rays by α Rays," *Nature*, 90 (Dec. 26, 1912), 463. Also: J. Chadwick, "Excitation of γ Rays by α Rays," *Phil. Mag.* Ser. 6, 25 (Jan. 1913), 193-97.

2. The "good deal of experimental work" was accomplished in a remarkably short time. In 1913 Rutherford (with his research students H. Richardson and H. Robinson) published three papers on the γ rays from different radioactive elements, viz: radium B, C, D, and E. thorium products and actinium products (*Phil. Mag.*, Ser. 6, 25 (1913), 722-34 and 324-32; 26 (1913), 937-48.) Further papers on the same topic appeared in 1914, viz: the soft γ rays from radium B, and the penetrating γ rays from radium B and C (both with E. N. da C. Andrade) (*ibid.* 27 (1914), 854-68 and 28 (1914), 263-73); the β rays excited by γ rays (with H. Robinson and W. E. Rawlinson) (*ibid.*, 28 (1914), 281-86); the connexion between the β and γ ray spectrum (*ibid.*, 28 (1914), 305-19).

3. "Young Bragg" refers to William Lawrence Bragg (1890-1971), the son of William Henry Bragg (1861-1942) who was Professor of Physics at Leeds University from 1909 to 1915. At the time of this letter the younger Bragg was a research student at the Cavendish Laboratory. A few months earlier, in May 1912, von Laue and his colleagues in Munich had announced the remarkable result of passing a narrow pencil of X-rays through a crystal of zinc blende (a form of zinc sul-

phide) which has a cubic structure. This gave rise to a regular pattern of dark dots on a photographic plate behind the crystal (see Note 1 of E-24). Laue's discovery was soon confirmed by other scientists and in October 1912 Bragg Senior, in a letter to *Nature*, stated that the positions of the spots in the pattern conformed to a simple numerical rule: W. H. Bragg, "X-rays and Crystals," *Nature*, 90 (Oct. 24, 1912), 219. Meanwhile at Cambridge Lawrence Bragg was undertaking his own research into the phenomenon, which resulted in a paper read at a meeting of the Cambridge Philosophical Society on November 11, 1912 and published three months later: W. L. Bragg, "The Diffraction of Short Electromagnetic Waves by a Crystal," *Proc. Camb. Phil. Soc.*, 17 (Feb. 1913), 43-57. In this paper Bragg advanced a theory to account for the pattern of spots and to explain his father's numerical rule. The theory included an equation (subsequently known as "Bragg's Law") relating the angle of reflection with the wavelength of the X-rays and the distance between successive planes of atoms in the crystal. Bragg's law is now a cornerstone of the science of X-ray crystallography. The elder Bragg acknowledged his son's theory in a second letter to *Nature*: W. H. Bragg, "X-rays and Crystals," *Nature*, 90 (Nov. 28, 1912), 360-61. In this letter Henry Bragg admitted that the new phenomenon pointed to a wave nature of X-rays and that his own "neutral pair" theory (see Note 2 of letter R-14) was inadequate to explain all the facts of radiation. "On the other hand," Bragg wrote, "the properties of X-rays point clearly to a quasi-corpuseular theory, and certain properties of light can be similarly interpreted. The problem then becomes ... not to decide between two theories of X-rays, but to find ... one theory which possesses the capacities of both."

There is a minor problem as to how Rutherford came to know about "young Bragg's explanation" in January 1913, since the relevant paper was not published until a month later. However, news of Lawrence Bragg's Cambridge paper in November was no doubt quickly disseminated in the relatively small British physics community, especially in view of Bragg Senior's November 28 letter in

Nature and the fact that Manchester and Leeds are almost neighbours.

The two Braggs subsequently undertook a study of crystal structure by X-ray diffraction which resulted in a joint book, *X-rays and Crystal Structure* (London: G. Bell and Sons, 1915) and a joint Nobel Prize (1915). W. L. Bragg was Rutherford's successor as Langworthy Professor of Physics at Manchester in 1919 and, again, as Cavendish Professor of Physics at Cambridge in 1938.

4. Charles T. R. Wilson (1869-1959) was the inventor of the "Wilson cloud chamber," whereby the paths of charged particles are rendered visible by the condensation of water vapour (in dust-free air) around nuclei formed by positive or negative ions (see Note 3 of letter E-18/19/20). The passage of an X- or γ -ray is not readily discernable by this method since the ions produced (mainly by an indirect process) are relatively few in number and widely spaced. Hence Wilson's initial conclusion that these rays do not ionize.

5. Henry G. J. Moseley (1887-1915) was the research student at Manchester whom Rutherford regarded as "in some respects the most promising of all [young British scientists]" (letter R-29 below). He is best known for "Moseley's law" relating the frequency of characteristic X-rays with the atomic number (i.e. nuclear charge) of the emitting element. This work was published in 1913 and 1914: H. G. J. Moseley, "The High Frequency Spectra of the Elements," *Phil. Mag. Ser. 6*, 26 (1913), 1024-34 and 27 (1914), 703-13. Moseley was killed on active service in 1915, a loss universally regarded as a tragedy for science. (For an appreciation of Moseley and his work, see Sir Charles Darwin, "Moseley and the Atomic Numbers of the Elements," in Birks: *Rutherford at Manchester*.) Rutherford's reference to Moseley in this letter is, however, puzzling since none of Moseley's published papers refers specifically to the question of whether or not X-rays ionize. On the other hand, another student of Rutherford, Florance, was working on this problem and had published a paper just before Rutherford wrote this letter: D. C. H. Florance, "A Study of the Ionization Produced by β and γ Rays at High Pressures," *Phil Mag. Ser. 6*, 25 (Jan. 1913),

172-83. Florance found that when the plates of his ionization chamber were 1 cm apart, the ionization due to rays in the air was negligible at atmospheric pressure but reached 25% of the total ionization at 80 atmospheres. He concluded that most of the ionization produced in a closed chamber is due to β rays produced in the walls of the vessel and escaping into the gas inside the chamber.

6. See Note 1 of letter E-21 above

7. Joseph A. Gray spent three years (1909-12) as an 1851 Exhibition Scholar in Rutherford's Manchester Laboratory and published a number of papers in that period, mainly on the properties of β -rays and the excitation of γ -rays by β -rays. In August 1912 he was appointed Lecturer in Physics at McGill. The Cambridge collection includes three letters written by Gray to Rutherford in the autumn of 1912.

E-26 Eve to Rutherford

860 St. Catherines Road
Cote des Neiges, Montreal
19 Jan 1913

This short letter begins with a mild reproach to Rutherford for not acknowledging receipt of the half-yearly draft [mortgage interest] sent early in December. The letter continues: "H. A. Wilson was here, and his wife, for Christmas. He has offered King¹ 2500 dollars and an Assistant Professorship at Houston. I hope that we may be able to retain King here, but it is uncertain... King has quite a paper in the *Phil. Trans* just appearing,² it ran the gauntlet of Larmor³ & Schuster⁴ without any material change."

The letter continues with a series of short statements: "I have not anything good on the stocks just now...the last *Phil. Mag.* brought out no positive results, with the marked exception of γ rays from α rays;⁵ Richardson is writing a book on radiation, Planck etc,⁶ which should prove useful; I found your new work very useful."⁷

The letter ends on a more personal note: "We...hope to visit England about the middle of May. They are going to settle appointments in February."

E-26 Notes

1. Harold A. Wilson had left McGill some months earlier to become Professor of Physics at the Rice Institute in Houston, Texas (see Note 3 of letter E-22). At the beginning of 1913 Louis V. King was a Lecturer in Physics at McGill. The post offered by Wilson at Houston represented both a promotion and (almost certainly) a considerable increase in salary. In the event King did *not* accept the offer and was rapidly promoted at McGill to the rank of Assistant Professor.
2. L. V. King, "On the scattering and absorption of light in gaseous media, with applications to the intensity of sky radiation." *Phil. Trans. Roy. Soc. (Lond.)*, Ser. A, 212 (March 1913), 375-433. Rutherford agreed with Eve that this was "quite a paper" (see letter R-23 below.)
3. Papers submitted to the Royal Society (of London) must be communicated by a Fellow of the Society. King's paper (Note 2 above) was communicated by Sir Joseph Larmor, the Secretary of the Royal Society at the time. Larmor (1857-1942) was Lucasian Professor of Natural Philosophy (i.e. Physics) at Cambridge and, since King was a Cambridge student in physics, it was appropriate for Larmor to sponsor, and to referee, King's paper. Larmor made important contributions to several branches of physical science but is probably best known today for the *Larmor precession* which orbiting charges experience when subjected to a magnetic field. This phenomenon is important in nuclear magnetic resonance studies and in magnetic resonance imaging.
4. Arthur Schuster (1851-1934) was Rutherford's predecessor, from 1887 to 1907, as Professor of Physics at Manchester (see Note 10 of letter R-1). When King submitted his paper to the Royal Society in June 1912, Schuster was the Secretary-Elect of the Society. As such he probably had some editorial function with respect to the *Transactions*, although this is not explicitly stated in the printed volume. Schuster made important contributions to science in several fields, including spectroscopy, conduction of electricity through gases and terrestrial magnetism.
5. The meaning of Eve's statement concerning "the last *Phil. Mag.*" is uncertain. Presumably the "last" *Phil. Mag.* was the January 1913 issue which probably reached Montreal a day or two before the letter was written. (The journal was published on the first day of the month.) However, apart from the paper on " γ rays from α rays," which Eve mentions: J. Chadwick, "Excitation of γ rays by α rays," *Phil. Mag.* Ser. 6, 25 (Jan. 1913), 193-97, this issue contains three other papers communicated to the journal by Rutherford, including a long paper by Bohr on the slowing down of charged particles moving through matter. To describe this issue as "without positive results" was thus somewhat tactless, and completely out-of-style for Eve. On the other hand, the December 1912 issue of *Phil. Mag.* contained nothing relating to radioactivity or radiation, apart from a short letter by Soddy and a letter from Rutherford correcting some data he had published in the October 1912 issue: E. Rutherford "On the energy of the groups of beta rays from radium," *Phil. Mag.*, Ser. 6, 24 (1912), 893-94.
6. Owen Willans Richardson (1879-1959) was an English physicist best known for his work on thermionics (he coined the term in 1909) and especially for the law relating the density of thermionic emission to the temperature of the emitting surface. He was awarded the Nobel Prize in Physics in 1928. Richardson was Professor of Physics at Princeton from 1906 to 1913, when he returned to England as Wheatstone Professor of Physics at King's College, London. It is virtually certain that Eve and Richardson were personally acquainted since some of Richardson's collaborators had worked at McGill and Richardson's wife was the sister of Eve's former colleague Harold A. Wilson. The book referred to in Eve's letter was *Electron Theory of Matter*, published in 1914 by Cambridge University Press. It is regarded as a "classic" in the field of electronics.
7. The reference to Rutherford's "new work" is unclear. It could refer to the 'goodly pile of papers' which Rutherford sent a month earlier (see letter E-24). Alternatively, this may be a reference to Rutherford's paper "On the origin of beta and gamma rays from radioactive subs-

tances" published in the October 1912 issue of *Phil. Mag.* (Ser. 6, 24), 453-62, and subsequently amended in the December 1912 issue in the letter cited in Note 5 above. This was a topic of particular interest to Eve.

R-21 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
Feb. 19th, 1913

My dear Eve,

I have arranged to give three Royal Institution Lecturers at the end of May,¹ and the last one will deal with the ionisation of the atmosphere. I should be glad if you would give me briefly your views of the present state of that subject and any modifications that you think may be necessary from the brief account in my book. I know that you have been working on the subject and possibly you can give me your general views as far as you feel inclined.

I shall be very interested to hear how matters are arranged at McGill. I have heard nothing at all recently. I have had several letters from Walker.² He has just been to London to see the doctors who find that his eyesight has in no way gone back and that no further operation is at present necessary. Mrs. Walker writes cheerfully, so I presume that they have hopes they have passed through the worst phase.

I understand from a letter of Barnes to my wife that there has been an epidemic of twins in the University; the latest addition being the Browns.³ It seems to me that the ladies of McGill are unusually efficient.

By the way, have you heard of the death of Professor Ebert⁴ of Munich? I have just received a notice to the effect from Munich. I never met him personally, but I should think he was a young man. He had done a good deal of excellent work, though some of it was of rather mixed quality.

Yours very sincerely,
E. Rutherford

R-21 Notes

1. Rutherford gave three lectures to the Royal Institution of Great Britain, in London, as follows:

24 May 1913: The Alpha Rays and their connection with the Transformations

31 May 1913: The origin of the Beta and Gamma Rays and the connection between them

7 June 1913: The radio-active State of the Earth and Atmosphere

2. Wallace Walker was formerly Macdonald Professor of Chemistry at McGill University and Joint Director of the Chemistry and Mining Building. In January 1912 he was granted a leave of absence to the end of the session since his eyesight was threatened with serious impairment. Shortly afterwards, in March 1912, Walker resigned from McGill on medical grounds.

3. "The Browns" were presumably Professor and Mrs. E. Brown. Brown was Professor of Applied Mechanics and Hydraulics at McGill.

4. Hermann Ebert was appointed Professor of Experimental Physics at the Technical University in Munich in 1898. He pioneered the investigation of atmospheric electrical phenomena, especially measurement of the ion content of air at different heights and locations (see Note 5 of letter E-8 and Note 1 of R-23 below). Ebert was 51 at the time of his death in February, 1913, not exactly the "young man" Rutherford had imagined.

R-22 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
March 5th, 1913

My dear Eve,

I have just received notice that the International Radium Standard has been deposited in the Bureau International des Poids et Mesures at Sevres.¹ The Director asks me to collect the signatures of the International Committee² to inscribe in the record. Please send me your signature on a slip of paper as soon as you can.

My Dear Eve... The Letters of Ernest Rutherford to Arthur Eve

I am hoping to hear from you soon about the negotiations at McGill. I am hard at work in the Laboratory and making good progress.

Yours very sincerely,
E. Rutherford

R-22 Notes

1. See Note 1 of R-16/17. Sèvres is a small community about 12 km from Paris.
2. "The Director" presumably refers to the International Bureau of Weights and Measures rather than the International Radium Standards Committee, which had a Secretary and two Chairmen but no Director. The Radium Committee comprised the seven members listed in R-16 above, plus Bertram Boltwood (U.S.), Arthur S. Eve (Canada) and Hans Geitel (Germany).

R-23 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
March 31st, 1913

My dear Eve

I am much obliged for your kindness in sending me the notes on atmospheric electricity. They were just what I wanted, and served as a good guide to me in bringing attention to the salient points. It is a very interesting but very puzzling subject, and I have been rather pleased to have to go into the question for my lecture next week.¹ Ebert's suggestion of the escape of the positive ions from the earth by diffusion² is, I think, quite reasonable, but unfortunately the probable magnitude of the effect is of quite a different order to that required.

I was sorry to hear about the death of Professor Johnson.³ He was a fine character, and one who was always very interested in Physics.

I have been hard at work this vacation repeating and verifying Danysz's numbers of the velocity of the groups of β rays.⁴ I am very much interested in that subject, but I want to be quite sure of the accuracy of Danysz's numbers. [He changed some of his values of H by 25%(!) in his last paper.]* I think I see my way

to a general explanation of the whole phenomenon. Most of the Laboratory are away on vacation, so it is rather pleasant to work, and I am not worried by other people.

I shall be interested to know of Peterson's general conclusions in regard to the Physics Department, and yourself particularly. I quite agree with you about King's Phil. Trans. paper.⁵ It was a fine piece of work well carried out. I wrote to him a week or so ago congratulating him upon it.

With kind regards to Mrs. Eve,

Yours very sincerely,
E. Rutherford

* Rutherford added this sentence by hand to the typescript.

R-23 Notes

1. Rutherford's reference to "my lecture next week" is puzzling. In fact, his lecture to the Royal Institution on atmospheric electricity was given two months later, on June 7 (see Note 1 of letter R-21). Perhaps he was due to give a lecture in Manchester on this topic "next week" as a prelude to the R. I. lecture.
2. H. Ebert and K. Kurz, "Registrierung der Luftelektrischen Zerstreuung in unmittelbarer Nähe der Erdbodens," *Physikalische Zeitschrift*, 11 (1910), 389-405.
3. Alexander Johnson was Professor of Mathematics and Natural Philosophy at McGill (1857-71), Redpath Professor of Natural Philosophy (1871-93), Redpath Professor of Pure Mathematics (1893-1903), Dean of the Faculty of Arts (1887-1903) and Vice-Principal (1887-1903). He died suddenly in an Ottawa street on February 10, 1913 at 82 years of age.
4. Jean Danysz was a physicist in Mme Curie's laboratory in Paris. His work on the velocities and intensities of the β -emissions from radium and its decay products was first published in 1911: J. Danysz, "Sur les rayons β de la famille du radium," *Comptes Rendus de l'Academie des Sciences*, 153 (1911), 339-41 and 1066-68. The work involved bending the path of the β -ray in a magnetic field of strength H gauss and recording photographically the radius of curvature (ρ cm) of the path. From

the product, $H\rho$, the velocity of the particle (or, rather, the ratio of this velocity to that of light) is readily calculated. Danysz identified 23 groups in the β -spectrum of the radium series, with velocities ranging from 0.615 to 0.996 of that of light and intensities ranging from 'strong' to 'very feeble.' Danysz published a later short paper on this subject in January 1913: J. Danysz, "Sur les rayons β des radiums B, C, D, E," *Le Radium*, 10 (1913), 4-6, but his definitive paper did not appear until October 1913: J. Danysz, "Rayons β de la famille du radium," *Annales de chimie et de physique*, Ser. 8, 30 (1913), 241-321. Rutherford's comment in March 1913 on Danysz's 'last paper' must therefore refer to the January paper rather than the later publication, and it is difficult to make a direct comparison between the values tabulated in this paper and those in the 1911 papers. The numbering and sequence of the groups is different, and an attempt to line up the groups, e.g. group 1 in 1911 becomes group 4 in 1913, 2 becomes 5 and so on, is frustrated by discrepancies in the intensities, e.g. group 11 (feeble) translates into group 14 (strong). Rutherford's caution was therefore justified.

5. See Note 2 of letter E-26.

R-24 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
June 3rd, 1913

My dear Eve,

I have received your letter¹ and I congratulate you on your appointment to the Physics Chair. I wish you all success in your new position, and hope that you will be able to keep research going pretty steadily. You must arrange not to have all your time and energy occupied in routine, and I hope you will be able to interest a number of young people in modern lines of work.

I have given two lectures at the Royal Institution, and give my third next Saturday on the radioactive state of the atmosphere.² I showed the experiment of counting the α particles using a string electrometer. Geiger has devised a modified detecting vessel, which is much more sensitive and steadier than our old

method, and if one has 1000 volts one can rig up the apparatus and have it going in five minutes without any worry.³ The deflections obtained were very large. Geiger has shown by this method that he can count β rays, and is at present at work on that point. He has not yet published an account of his work.⁴

We are hoping soon to get to the publication of several papers on β rays, β rays and γ rays, and I want, if possible, to clear the whole subject up before writing about it.⁵

I am glad to hear that you have been able to do something for King in the general shift up. How is Gray getting along? I have just seen W. Wilson, who has been working for McLennan. He seems to enjoy his Canadian life and tells me that Gray seems content with his work.⁶

I have forgotten what the subject for the Adams Prize is for 1914.⁷ I would certainly keep a close eye on King and keep him clear of metaphysical subtleties. I think his breakdown before was partly due to thinking too much on such subjects, and when I saw him in Montreal some years ago I concluded that he had not entirely rid himself of the idea that he had made great discoveries at Cambridge.

Eileen has just had an operation for tonsils and adenoids, and is pretty well again. My wife has gone over by motor to Robin Hood's Bay⁸ to look out for a seaside resort for Eileen in the summer. We are probably intending to take a motor tour through Germany to the Tyrol. I will be in Manchester till the end of July and would very much like to see you. If we have room in the house, we shall be delighted to have you and Mrs. Eve stay with us. Please let us know the probable times you have available so that we can arrange beforehand. We are expecting Boltwood⁹ to come and stay with us in a fortnight's time.

With kind regards and congratulations to yourself and Mrs. Eve.

Yours very sincerely
E. Rutherford

R-24 Notes

1. The letter from Eve to which Rutherford refers has not been preserved. Indeed, there

is a gap of 13 months between E-26 (19 Jan. 1913) and E-27 (27 Feb. 1914). The "Physics Chair" to which Eve was appointed was the Macdonald Chair formerly occupied by Rutherford and subsequently by H. A. Wilson until his resignation in June 1912 (see Note 8 of letter R-9). The post had been vacant for a year. It should be noted that this post was not that of Chairman of the Physics Department (officially, still designated as "Director of the Physics Building"); this position remained occupied by Barnes.

2. See Note 1 of letter R-21.

3. A string electrometer comprises a fine silvered quartz fibre suspended between two parallel plates, where one plate is at +100 volts, the other at -100 V. When a small voltage is applied to the fibre, a deflection occurs and this can be measured with a microscope. The advantage of a string electrometer, as compared with a quadrant electrometer, is the rapidity of its response to any change in voltage. This property is very useful for counting single particles since the passage of each particle through a suitable ionization vessel such as a 'Geiger detector' (see Note 4 below) causes a momentary pulse of ionization current and hence a pulse of voltage which can be detected by an electrometer if its response time is short.

4. Hans Geiger was no longer at Manchester, having moved back to Germany (Berlin-Charlottenburg) in 1912: see Note 5 of letter R-9). However, the *Rutherford Correspondence Catalog* lists no fewer than 10 letters from Geiger to Rutherford in the period October 1912–May 1913 and it is therefore not surprising that Rutherford was aware of Geiger's recent work. The modified detector, in a form more closely resembling the modern 'Geiger counter' than the device described by Rutherford and Geiger in 1908 (see Note 7 of letter R-5), was published later in 1913: H. Geiger, "Demonstration einer einfachen Methode zur Zählung von α - und β -Strahlung," *Physikalische Zeitschrift*, 14 (Nov. 1913), 1129.

5. The phrase " β rays, β rays and γ rays" refers to the relationship between the two types of radiation as well as the properties of each. In the 18 months following this letter,

Rutherford and 12 of his colleagues and students published about 20 papers on these topics. Some of these papers were listed in Note 2 of letter R-20 above, and a full bibliography is to be found in Birks: *Rutherford at Manchester*. It is doubtful, however, whether even this large output accomplished Rutherford's aim to "clear the whole subject up."

6. Louis V. King was promoted from Assistant to Associate Professor of Physics at McGill (see also letter E-26). William Wilson was a graduate student in Physics at Manchester from 1906 to 1911, during which period he published 10 papers on various aspects of radioactivity. He then moved to the University of Toronto where he held a teaching appointment under J. C. McLennan, the Professor of Physics. McLennan made important contributions to the study of the radioactivity of rocks, air and water. Gray: see Note 7 of letter R-20.

7. John Couch Adams (1819-1892) was a Fellow of St. John's College, Cambridge and (1859) Professor of Astronomy and Geometry at Cambridge. In 1845 he calculated the mass and orbit of an unknown planet needed to explain irregularities in the motion of the planet Uranus. As a result of his work (and, even more so, the simultaneous calculations of the French astronomer, Urbain Le Verrier), the planet Neptune was discovered a year later, in September 1846. In 1848 Adams was awarded the Copley Medal of the Royal Society and, in the same year, the Adams Prize was founded in his honour by members of St. John's College. The prize was to be awarded biennially for the best essay on "some subject of Pure Mathematics, Astronomy or other branch of Natural Philosophy." The competition was restricted to persons holding a degree in Cambridge University. The subject for 1914 (announced in March 1913) was "The phenomena of the disturbed motion of fluids, including the resistance encountered by bodies moving through them." The value of the award was about £220. Louis King submitted a treatise but was not awarded the prize. The winner (announced on 9 April 1915) was Geoffrey Ingram Taylor, Fellow of Trinity College, Cambridge, for an essay titled *Turbulent Motion in Fluids*. The Adams Prize is still

awarded biennially and remains a highly prestigious award.

8. Robin Hood's Bay is between Scarborough and Whitby on the north-east (Yorkshire) coast of England.

9. At this time Bertram Boltwood was Professor of Radiochemistry at Yale. He spent the summer of 1913 in Europe (Holland, Germany and Austria) and had evidently promised to visit the Rutherfords in Manchester either at the beginning or the end of the trip. On 2 April 1913 Mary Rutherford wrote to Boltwood: "We are delighted to hear you are coming over & want you to promise to come to us first, as soon as you arrive in June, as we may not be here early in September." [Badash: *Rutherford and Boltwood*, 284.] This is the only reference to Boltwood's visit in the Rutherford-Boltwood correspondence.

R-25 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
Dec. 15th, 1913

My dear Eve,

I received this morning a draft for £12.16.10 and enclose herewith a formal receipt.

I am very glad to hear that things are going well with you. I am hard at work on a number of problems, theoretical and practical. The experiments to determine the wave length of the rays is proceeding well, but the effects are so relatively weak and the radiations so mixed that it takes a lot of work to disentangle them. There is no doubt, however, in my mind that the radiation consists of groups of definite frequency. We are examining the question by the electrical as well as by the photographic method. The problem is much more difficult than the ordinary X ray problem, as some of the waves are ten times shorter, and the angle of selective reflection is, in the case of penetrating rays, under 1° .¹

I asked Marsden² here to examine for me the effect of sending particles through hydrogen. As I anticipated, he found that he could detect scintillations over nearly four times the range of the α rays. There appears to be no

doubt that a small fraction of the hydrogen atoms are set in motion with speeds considerably greater than the α particle. Such a result is to be expected from my theory of the nucleus atom, and I am writing up the whole question shortly.³ Other experiments are going on on γ rays, counting β particles, recoil atoms, diffusion of actinium emanation, and so on.

We are all well and in good form, and are trying to settle the route by which we travel to Australia.⁵ We are not certain whether to go by Canada or the Cape.

Give my kind regards to Barnes, Grey and King.⁶

With best wishes to you all for a merry Christmas and Happy New Year.

Yours very sincerely,
E. Rutherford

R-25 Notes

1. Bragg's law (see Note 3 of letter R-20) states that the sine of θ , the angle of "reflection" (by planes of atoms in the crystal) is proportional to the wavelength of the radiation. It follows that the deviation of the "reflected" beam from the incident (primary) beam is 2θ . Also, for small angles, $\sin \theta$ is approximately equal to θ (in radians). Hence, for short wavelength radiation such as radium γ -rays the deviation of the diffracted rays from the primary beam is small and accurate measurement is difficult. X-ray diffraction studies, in which the aim is to study the crystal structure rather than the radiation, are therefore performed with relatively long wavelength X-rays generated at low kilovoltages.

2. Ernest Marsden (1889-1970) was Lecturer in Physics and John Harling Fellow at Manchester University. In 1914 he moved to New Zealand as Professor of Physics at Victoria University College in Wellington. Later he became Secretary of the N. Z. Department of Scientific and Industrial Research (1927-47) and Scientific Liaison Officer for New Zealand in London (1947-57). He was knighted in 1958. Marsden's five-year stay in Manchester resulted in 13 publications, in collaboration with various colleagues including Geiger.

My Dear Eve... The Letters of Ernest Rutherford to Arthur Eve

3. Rutherford's resolve to "write up the whole question shortly" resulted in three papers in Volume 27 (Ser. 6) of the *Philosophical Magazine* in the first half of 1914: E. Rutherford, "The structure of the atom," pp. 488-98; C. G. Darwin, "Collision of α -particles with light atoms," pp. 499-506; and E. Marsden, "The passage of α -particles through hydrogen," pp. 824-30. As the titles indicate, the experimental work with α -particles was described in the papers by Darwin and Marsden, and the latter referred to his paper as a "preliminary account." However, apart from a short follow-up paper in 1915: E. Marsden and W. C. Lantsberry, "The passage of α -particles through hydrogen II," *Phil. Mag.*, Ser. 6, 30 (1915), 240-43, the intervention of the First World War prevented any further discussion of this topic until 1919. Rutherford's own paper, and in particular the relationship between his 1911 and 1914 papers on the nuclear atom, is discussed in the Introduction to the present article.

4. The volume of activity in Rutherford's laboratory is indicated by the fact that, in the 12 months following this letter, Rutherford and his colleagues published about 15 papers on the four topics mentioned, not counting papers on other topics under investigation by the department. (See also Note 5 of letter R-24.)

5. Rutherford had arranged to take his wife and daughter to Australia and New Zealand during the summer of 1914. The trip would combine attendance at the British Association annual meeting (in 4 Australian cities in September) with vacation and visits to family and friends in New Zealand. In the event, they travelled via the Cape on the outward journey and via Canada on the return trip.

6. Barnes: see Note 1 of letter E-21, Note 5 of letter E-29, and letter R-20. Grey: this is almost certainly a typographical error for Gray (see Note 7 of letter R-20). King: see Notes 1 and 2 of letter E-26.

R-26 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
Jan. 19th, 1914

My dear Eve,

Many thanks for your kind letter of congratulations on the New Year's honour.¹ I may say to you that it was very unexpected and not altogether desirable, for I feel such forms of recognition are not very suitable to people like myself. However, I am, of course, pleased at this public recognition of my labours, and hope that my activity will not be lessened by this transformation.

I have been deluged with letters of congratulations etc. and no sooner do I get control of the English ones when this morning I get a great batch from Canada, and the New Zealand ones have still to follow. For this reason please excuse a typewritten letter, as I am absolutely weary of putting pen to paper.

We saw, of course, in the papers about the Montreal water famine and the fire there, which no doubt made you all feel rather nervous.² It sounds rather ridiculous for a city of the size and importance of Montreal. I must confess that it would appear that this old decadent country does do some things better than Canada.

I am running over to Washington in April for a hurried trip to deliver two lectures before the National Academy of Sciences.³ I hope to see a good many of my friends, but doubt whether I shall have time to visit Montreal.⁴

University lectures are now in full swing again, and I am kept pretty busy. I suppose I shall have to go down to London some time in the next month decked out in all the glory of a special uniform to be authentically knighted. It will be rather trying, but I hope I shall be able to get some amusement out of it.

Give my kind regards to Mrs. Eve, and with best wishes to you all.

Yours very sincerely,
E. Rutherford

R-26 Notes

1. Eve's congratulatory letter is no longer extant. The New Year's honour was a Knighthood: Sir Ernest Rutherford. In its editorial comment (Jan. 1, 1914) on the honours list, the London *Times* evidently did not consider that a Nobel Laureate and Fellow of the

Royal Society was worthy of special mention. That privilege was reserved for a judge, a Member of Parliament and the editor of *Punch*. In a letter of congratulations dated 11 January 1914, Bertram Boltwood wrote "...I cannot possibly express my delight at the well-deserved honour (notice the u) which has been bestowed upon you ... The list of New Year's honours as published in the hopelessly incompetent newspapers of this country [U.S.A.], did not include your name, although they gave the impression of completeness..." [Badash, *Rutherford and Boltwood*, 289]. In his reply on 27 January 1914, Rutherford wrote: "Eileen is of opinion that her parents have not that natural "swank" to carry off such a decoration with dignity but I am afraid such distinctions make very little difference to yours truly, for I have enough democratic tendencies to see the humorous side of this business." [*Ibid.*, 290]. See also Note 8 of letter E-27.

2. On December 27, 1913, the London *Times* reported that Montreal was suffering a severe water shortage owing to the collapse of a concrete inlet pipe in the municipal plant. Hospitals were compelled to purchase aerated water by the ton, while the poor used melted snow. Tubs of water were placed in the streets in crowded sections of the city. Many factories were forced to close. A further break in the conduit occurred on December 31. The water supply was restored on January 3, 1914, but the municipal authorities admitted that the repairs were only temporary and a further breakdown was feared. On January 14, 1914 Montreal was again in the news: the *Times* reported that a fire in a warehouse in the business section ("Old Montreal") had threatened the whole area including Notre Dame Cathedral. The firefighters were hampered by a temperature of -25°F (-32°C) (nearly every fireman was frostbitten) and by the outbreak of several other fires.

3. Rutherford had been elected a "Foreign Associate" of the (U.S.) National Academy of Sciences in 1911. His 1914 lectures to the Academy were delivered on April 21 and 23 in the auditorium of the National Museum in Washington, D.C. They were the first "Hale lectures," named in honour of the late William Ellery Hale of Chicago, and were open to the public. The subject of both presentations was

"The Constitution of Matter and the Evolution of the Elements." The use of the word 'evolution' was apparently deliberate since the Academy had planned a series of lectures on the subject of evolution, i.e. "to outline the broad features of inorganic and organic evolution in the light of recent research." (National Academy of Sciences, Annual Report for 1914). The texts of Rutherford's lectures were published in the *Smithsonian Report for 1915*, pp. 167-202.

4. In fact, Rutherford did come to Montreal: see letters R-27, E-27 and E-28.

R-27 Rutherford to Eve (Figure 5)

17 Wilmslow Road
Withington, Manchester
Feb. 17th, 1914

My dear Eve,

I think I told you that I was going to America early in April to deliver some lectures in Washington from April 21st to 23rd. I think I shall be able to arrange to travel via Canada, and may quite likely go by the Calgarian that leaves on March 28th, and I should consequently get to Montreal about the 4th or 5th, and will be able to stay there three or four days. I shall then go South to Boston, New Haven, New York and Washington, and return probably by the Laurentic on April 25th, as I have to get back as early as possible in the University term. I hope to have an opportunity of seeing you and your family and many of my old friends in Montreal in this way.

If it is quite convenient to you, I should be glad if you could put me up for my stay. Don't hesitate to say no if circumstances are such!

Yours very sincerely,
E. Rutherford

* The last sentence was added by hand

E-27 Eve to Rutherford

McGill University
The Macdonald Physics Building
27 Feb 1914

At the top of the letter, underlined, Eve writes "See P.S. first." The postscript reads as follows: "I took this letter to the Janitor's office

and was posting it and there and then found your letter of 17th Feb. ¹ Yes by all means come to us, it will be splendid, and we shall be delighted. I thought you were all on your way to the Southern Hemisphere then."²

In view of this postscript, most of the letter itself is irrelevant, but Eve sends it all the same. It reads as follows: "We were all very glad to learn that you are coming through Montreal in April. My wife and I would be proud and delighted if you & Lady Rutherford would come and stay with us, also Eileen of course.³ Please understand that we want you to come to us very badly; also if more central quarters⁴ would suit you better, you must suit your own convenience first of all. I hope that my meaning is clear, and that you understand that this is a very genuine invitation on our part, and I think that we could make you comfortable, but I know that others may have a larger claim, and might look after you better."

The remainder of the letter comprises three short items of news: "Young Ostwald⁵ is giving us 5 excellent lectures on Colloid Chemistry; professors doctors and medical students crowd the Chemistry Theatre. Ruttan⁶ fell on some ice and tore the muscles from his knee cap. It is a long job I fear. He is at the R. V. H."⁷ My mother sent me a glowing account of your visit to Southport,⁸ and it was nice of you to go."

E-27 Notes

1. Letter R-27. It may be noted, in passing, that the 10 days required in 1914 for delivery in Montreal of a letter from England has improved only marginally with the advent of airmail.

2. As stated in Note 5 of letter R-25, Rutherford had arranged to take his wife and daughter to Australia and New Zealand during the summer of 1914. Eve evidently assumed that the visit to North America in April was the first stage of the journey to the Southern Hemisphere and Rutherford would therefore be accompanied by his family. In fact the North American trip was separate. On his return to England in June, Rutherford wrote to Boltwood: "Since my arrival, I have been exceedingly occupied trying to get things ready for my departure, which takes place in about

10 days' time. (Badash: *Rutherford and Boltwood*, 293.)

3. Eileen was the daughter (and only child) of Professor and Mrs. Rutherford.

4. The Eve family home in the Côte des Neiges suburb of Montreal was several kilometres from the centre of Montreal, including McGill University. Nowadays Côte des Neiges is considered an "inner" suburb.

5. Carl Wilhelm Ostwald (1883-1943) is considered to be the founder of colloid chemistry. The son of Friedrich Wilhelm Ostwald (1853-1932), one of the founders of physical chemistry, Carl Wilhelm was educated in Leipzig and became Professor of Colloid Chemistry there in 1915. He spent considerable time in the U.S., as a research assistant in Berkeley, California (1904-06) and later as a popular itinerant lecturer.

6. Robert Ruttan was Chairman of Chemistry at McGill from 1913 to 1928 and Dean of Graduate Studies, 1924-27.

7. Royal Victoria Hospital, Montreal.

8. Southport is a seaside resort on the west coast of England, about 60 km from Manchester. On January 25, 1914, Eve's mother wrote to her son and daughter-in-law from the Prince of Wales Hotel, Southport: "... so kind of Betty [Mrs. Elizabeth Eve] to write when she must be so busy—I was so glad of her suggestion about the Rutherfords & wrote to them at once & they both had lunch with me yesterday—I was so pleased to see them especially him—he agreed with me about your being a dear boy—we had a good laugh together—she is more delighted at her title than he is. He is as nice & natural as of old." (Eve correspondence collection at McGill University). It is not known, however, whether the Rutherfords made a special visit to Southport, or were there on other business.

E-28 Eve to Rutherford

860 St. Catherines Road
Cote des Neiges, Montreal
1 March 1914

The main purpose of this short letter is to invite Rutherford to address a joint meeting

of the McGill Physical and Chemical Societies on Tuesday afternoon, April 7th. "We could have the meeting on Monday, if preferred. We are thinking of sending tickets to Governors, Professors, Doctors and honours students, and you may be sure of a roomful and a hearty welcome. Please pick your own subject, but possibly the Constitution of the Atom would be a good subject.¹ Of course we leave that to you...everyone here is delighted that you are coming to Montreal."

Eve follows up his previous reference to Ostwald's lectures on colloid chemistry at McGill:² "...the Chemistry theatre overflowed every evening. Get him to Manchester, if you get a chance ... he is an excellent lecturer, and good company."

The letter ends on a familiar note: "Last week we thought spring was beginning and now it snows harder than ever."

E-28 Notes

1. The Minutes of the McGill Physical Society indicate that the joint meeting took place on Thursday, April 9, 1914, and the title of Rutherford's lecture was "The Detection of Atoms and their Structure." (See letter R-28 below.) The minutes state that "The meeting was attended by many members of Faculty and friends and by a number of undergraduates." The following day the *Montreal Gazette* reported the meeting under the heading "Expert describes atom's structure."
2. See Note 5 of letter E-27 above. A carbon copy of the text of Ostwald's five lectures is held in the Archives of McGill University.

R-28 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
March 14th, 1914

My dear Eve,

I received your two letters on the same day,¹ and am very glad to hear that you can arrange to put me up. I was intending to travel by the Calgarian, but have just been informed that owing to labour troubles she will not be ready in time, so I am travelling by the Tunisian to

Halifax, leaving here on March 28th. I will wire you on arrival at the latter place so that you may know the time of my arrival.

I note what you say about a meeting of the Physical and Chemical Societies on April 7th. I presume there will be no difficulty in being there on time. I shall, of course, be quite glad to give a lecture before them, and would suggest as my title, "The detection of atoms and their structure."² I shall probably bring a string electrometer with me, and some of my small Clark cells, but will probably want an extra 500 volts if I show the experiment. I also may have with me sufficient material for another experiment, which will be difficult to get made in a hurry.

I am looking forward to my trip but hope the weather will not be too boisterous on the way over. I shall be glad if you will remember that I am a lazy man, and do not want all my time completely filled up with engagements before my arrival. If any suggestions are made, you will understand the sort of things that I would be glad to consider.³

We have Professor and Mrs. Laby staying with us, and they are going back to New Zealand via Canada.⁴ They will call on you in Montreal, and I should be grateful for any attention you can show them. We have had them staying in our house for the last five days and Mrs. Laby has been ill with influenza most of that time, and will have to be taken care of for some time. Au revoir.

With kind regards,

Yours very sincerely,
E. Rutherford

R-28 Notes

1. Letters E-27 (27 Feb. 1914) and E-28 (1 Mar. 1914).
2. See Note 1 of letter E-28.
3. At first sight, Rutherford's description of himself as "a lazy man" is astonishing. A possible interpretation is as follows: Rutherford devoted a high proportion of his waking hours to science, during which periods he worked hard and efficiently. But he did not believe that work should exclude other activities: on the

Feb. 17th., 1914.

University term.

I hope to have an

opportunity of seeing you and your family and many of my old friends in Montreal in this way.

My dear *Eve*.

I think I told you that I was going to America early in April to deliver some lectures in Washington from April 21st to 23rd. I think I shall be able to

arrange to travel via Canada, and may quite likely go by the Calgarian that leaves on March 28th, and I should consequently get to Montreal about the 4th or 5th, and will be able to stay there three or four days.

I shall then go South to Boston, New Haven, New York and Washington, and return probably by the *Lo^urentic* on April 25th., as I have to get back as early as possible in the

If it is quite convenient to you, I should be glad if you could put me up for my stay. *Don't hesitate to say no if circumstances are such!*
Yours very sincerely,

E Rutherford

My Dear Eve... The Letters of Ernest Rutherford to Arthur Eve

Figure 5. Complete text of short letter from Rutherford to Eve (R-27) dated February 17, 1914. (The Manchester address is embossed on the notepaper and does not reproduce photographically.)

contrary, he enjoyed his home and garden, reading, talking, playing golf. In addition, he and his wife took regular vacations. Rutherford is saying to Eve in this letter: "A trip to North America is an opportunity for relaxation as well as for serious work. Please make sure that there is time for both."

4. Thomas Howell Laby (1880-1946) was an Australian physicist who (like Rutherford) had undertaken graduate research at the Cavendish Laboratory through an 1851 Exhibition Scholarship. At the time of this correspondence, Laby was a professor of physics at Wellington, New Zealand. Laby contributed to several branches of physics, including heat and X-rays, but is probably best remembered as the joint author (with George W. C. Kaye) of "Tables of Physical and Chemical Constants." The first edition of "Kaye and Laby" was published in 1911, the 15th in 1986 (prepared by an Editorial Committee of British scientists, since both original authors had since died.)

E-29 Eve to Rutherford

McGill University, Montreal
The Macdonald Physics Building
18 May 1914

This is Eve's first letter after Rutherford's stay in Montreal in April, and contains a number of (largely unrelated) items of news and comment. Eve begins by stating that he has heard from Dr. Viol,¹ who had visited Washington, that Rutherford's lectures in that city were a great success. In the same paragraph Eve notes that "The Standard Chemical Co. of Pittsburgh seem to turn out about a gramme of radium a month."²

Eve thanks Rutherford for coming to Montreal: "Your visit here was much appreciated, and it was very nice of you to come."

Next, news of McGill personnel. "You will have heard that Dean and Mrs. Walton have left McGill for a Govt appointment in Cairo. ³ McIntosh ⁴ goes in 1915 as Prof. of Chemistry to the new University of B. C. Also it is now an open secret ... that Barnes is going in 1915 as Prof. of Physics to B. C. also. I am sorry he is going ... but he made up his mind, partly because he thought it would be good for the

children.⁵ I do not know what they will do about his post. I recommended Peterson⁶ to take a big boat and catch a whale! But I don't much think they will!"

Eve says that he likes Rutherford's (and Andrade's) paper in the May *Phil. Mag.*⁷ "Things are tumbling into shape at a great rate." However, "J.J.T.'s article is too electrostatic."⁸

The letter ends on a family note: "Your godson Dick is very pleased with his Mecano, and he wants me to take a whole holiday soon, and work through all the different Mecano diagrams at once."⁹

A postscript to the letter is as follows: "I have a perfect Geiger detector now, and run it (with electrophones etc) [with] 4 Leyden Jars at 1450 volts. Pye silvered the thread (quartz) for me in the building. I have been trying to hear the electrons with a telephone, but without success yet."¹⁰

E-29 Notes

1. Charles C. Viol was an Assistant in Chemistry at the University of Chicago.

2. Within a few years of the isolation of 0.1 g of pure radium by Mme. Curie in 1902, radium was being produced on an industrial scale in several countries. The demand for radium, and hence its price, increased rapidly once its value in the treatment of cancer was recognized. According to Robert Reid, "Marie Curie," (New York: Saturday Review Press/E. P. Dutton & Co., 1974) the cost (in English money) of radium salts rose from £400 per gram in 1903 to £15,000 in 1912. During World War I the price was again inflated by demand for radium for use in gunsights and compass cards, and reached £20,000 (or U. S. \$100,000) per gram by 1920. Ironically, the discoverer of radium, Marie Curie, derived no financial benefit from the bonanza since she had not patented her method of separating the element.

3. Frederick P. Walton was Dean of Law at McGill from 1897 to 1914. The Annual Report of McGill University 1913-14 states that "Dean Walton was on furlough for a year in Cairo when he received a flattering invitation from

the Government of Egypt to undertake the work of drafting a new code." His new post was that of Legal Advisor to the Egyptian Government.

4. Douglas McIntosh was Professor of Physical Chemistry at McGill.

5. Barnes' resignation from McGill was supposed to take effect as from September 1, 1915. Eve's comment that the proposed move was partly in the interest of the children was correct. In a letter to Rutherford dated June 2, 1914, Barnes wrote: "I am sorry to leave this old laboratory but I feel that a change of place will do me no harm. The climate at Vancouver is much milder than here and we can all live much more out of doors. I feel that the boys will have a better chance." In the event, however, the promised facilities at the new University of British Columbia in Vancouver failed to materialize and Barnes withdrew his resignation. He remained at McGill, as Director of the Macdonald Physics Building, during the difficult years of the War, but in 1918 a serious breakdown obliged him to resign. (See also Note 1 of letter E-21.)

6. William Peterson was Principal of McGill University. (See also Note 7 of letter R-9 in Part II.)

7. Rutherford and E. N. da C. Andrade, "The wavelength of soft gamma rays from radium B," *Phil. Mag.*, Ser. 6, 27 (1914), 854-68.

8. J. J. Thomson, "The forces between atoms and chemical affinity," *Phil. Mag.* Ser. 6, 27 (1914), 757-89.

9. Meccano (Eve's spelling was in error): defined in the *Oxford English Dictionary* as "1908. Trade name of a set of miniature parts from which engineering models can be constructed."

10. The "Geiger detector," now usually called a "Geiger counter," was developed by Geiger and Rutherford in 1907-08 (see Note 7 of letter R-5) and subsequently modified and improved. The instrument requires a steady voltage in the range 1000-1500 volts, hence the need for "Leyden Jars" which are essentially large capacitors designed to store electric charge and hence build up a high voltage. The

Geiger counter is able to detect the passage of individual charged particles, such as electrons or α -particles, and modern instruments usually provide an audible indication of each particle, in the form of clicks emitted by a loudspeaker or earphone. However the early instruments did not have this facility and Eve's comment indicates that the provision of an audible signal is not as simple as we assume today.

E-30 Eve to Rutherford (Figure 6)

860 St. Catherines Road
Cote des Neiges, Montreal
3 June 1914

The ostensible purpose of this letter is to send "the usual draft [due early in June], which will catch you in England I hope."

Eve begins the "news" part of the letter by stating that he has invented a new word *radiant* for radioactive substance. "Thus there are about 37 radiants. Polonium is a radiant, etc. Try it."¹

The letter continues "We are just back from Tennis at the Pitchers."² H. A. Wilson is coming here on Monday from Texas.³ I met his wife at tennis today. They go to the coast of Main[e]. Please remember me to the Labys, when you see them."⁴

Next, some science news: "We had an excellent set of papers at Section III, Royal Society of Canada, which met at Montreal & the attendance was good."⁵ I tried to rouse a discussion on the atom but could not provoke one. King⁶ found that you do not need h for blue sky and scattering work. He has found Walker's formula for black body radiation⁷ in Chwolson's *Lehrbuch der Physik*.⁸ It was obtained by a Russian in 1888! That is a joke on Larmor⁹ and Walker."¹¹

The letter ends on a sad note: "We lost Dr. and Mrs. Barlow,¹⁰ he was a geologist, on the ill-fated *Empress*."¹¹

E-30 Notes

1. Eve's suggestion received no response from Rutherford. Indeed, the latter's reply to this letter does not even mention the proposal

(see letter R-30). Nevertheless Eve was right to point out that a shorter name for 'radioactive substance' is needed and, indeed, such a term is now in common use: *radionuclide*.

2. Harriet Pitcher, née Brooks, was Eve's sister-in-law and a former graduate student of Rutherford's. In 1907 she married Frank Pitcher, a former Demonstrator in the Macdonald Physics Building (see Note 11 of letter E-1). A short biographical study of Brooks is that of M. F. Rayner-Canham and G. W. Rayner-Canham, "Harriet Brooks--Pioneer nuclear scientist," *Am. J. Phys.* 57 (1989), 899-902. (These authors have also written a full biography of Brooks, to be published by McGill-Queen's University Press, Montreal).

3. Harold A. Wilson: see Note 8 of letter R-9 and Note 3 of letter E-22.

4. See Note 4 of letter R-28.

5. Section III (Physical Sciences) of the Royal Society of Canada met in Montreal on May 26-28, 1914. Apart from a brief Presidential Address by R. F. Stupart, Director of the Meteorological Service of Canada, the leading paper in the session was that of A. S. Eve, "Modern Views on the Constitution of the Atom," *Trans. Roy. Soc. Can.*, Ser. 3, 8 (1914), 9-18. Members of the McGill Physics Laboratory, including Barnes and King, contributed 10 other papers, over half the total number of presentations in the 3-day meeting of the Section.

6. King: see Notes 1 and 2 of letter E-26. It is possible that Eve's reference to King at this point in the letter was prompted by the Royal Society of Canada meeting just mentioned, since King's paper at the meeting was concerned with the absorption of solar radiation by the Earth's atmosphere.

7. A *black body* is an ideal body or system that absorbs all the radiation incident on it. When such a body is heated it emits radiation of various wavelengths (mainly infrared but also visible light at high temperatures) and an important problem in 19th century physics was to explain the distribution (spectrum) of wavelengths at any given temperature. The "classical" formula, known as the *Rayleigh-Jeans law*, agrees with experimental results at long wavelengths but not at all at short wave-

lengths. In 1900 Max Planck modified the classical formula by postulating that energy is not emitted or absorbed by the black body in a continuous fashion but in discrete packets or *quanta*, such that the size of the energy quantum (E) is inversely proportional to the wavelength (λ) of the radiation. The constant of proportionality (h) in the relationship $E = hc/\lambda$ is known as *Planck's constant* (c is the velocity of light, also a constant).

George W. Walker, FRS, was Superintendent of the Eskdalemuir Magnetic Observatory in the Lake District, England. He was evidently a member of the group of scientists who vigorously opposed the introduction of quantum concepts and sought to eliminate Planck's constant wherever it appeared. On November 13, 1913, Walker read a paper at a meeting of the Royal Society: "A Suggestion as to the Origin of Black Body Radiation," *Proc. Roy. Soc.*, Ser. A, 89 (March 1914), 393-98. Walker postulated that "there must be many formulae which will express the data as well as Planck's form," and he deduced such a formula on the basis of his earlier work on the motion of a charged sphere. He concluded that: (i) the experimental data on black-body radiation can be well represented by a formula of the dynamical type, and (ii) Newtonian dynamics and the electrodynamics of Larmor are capable of giving an explanation of that formula. Sir Joseph Larmor's name was linked further with this work in that he was thanked for helpful discussion and suggestions. Walker's formula was, however, quickly forgotten as evidence for the quantum nature of radiation accumulated and was soon overwhelming.

8. Orest Daniilovich Chwolson was a Professor of Physics at the Imperial University of St. Petersburg. His textbook of physics, in 4 volumes, was published in the 1890s. A German translation of Volume II of the 2nd (1903) Russian edition was published in 1904 and covered sound and radiant energy (*Lehrbuch der Physik*, Braunschweig: Friedrich Vieweg und Sohn). The book (p. 225) credits Wladimir A. Michelson of Moscow with the first formula for black-body radiation, published in the *Journal de la Société Physico-chimique Russe*, 19 (1887), 79. A shortened version of this paper was subsequently pub-

My Dear Eve... The Letters of Ernest Rutherford to Arthur Eve

lished in Paris in the *Journal de physique théorique et appliquée*, Ser. 2, 6 (1887), 467-79, and an English translation of the latter appeared in 1888: W. A. Michelson, "Theoretical essay on the distribution of energy in the spectra of solids," *Phil. Mag.*, Ser. 5, 25 (1888), 425-35. Eve's information, with its 1888 date, was presumably derived from the latter paper. Reviews of volumes 1 and 2 of *Lehrbuch der Physik* were given in *Physical Review*, 17 (1903), 318-19 and 20 (1905), 64 respectively.

9. Sir Joseph Larmor: see Note 3 of letter E-26 above. Larmor was certainly interested in the problem of black body radiation and published several papers on this topic over the years, e.g. J. Larmor: "On the Relations of Radiation to Temperature," *Nature*, 63 (Dec. 27, 1900), 216-18. However, the linkage of Larmor with Walker in Eve's letter appears to be based on the paper cited in Note 7 above.

10. Alfred E. Barlow was a Sessional Lecturer in Economic Geology at McGill.

11. At about 1:30 a.m. on May 29, 1914, the Canadian Pacific Railway liner *Empress of Ireland*, bound from Quebec City to Liverpool, was struck amidships by the Norwegian collier *Storstad*. The accident occurred in the St. Lawrence River, about 200 miles east of Quebec City. The *Empress* had been compelled by fog to lie off Father Point, near Rimouski. The liner sank within 10 or 15 minutes and most passengers had no time to board lifeboats. On the 1,367 passengers and crew on board only 396 were rescued. This tragedy almost rivalled that of the *Titanic* (1503 lost).

R-29 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
June 4th, 1914

Dear Eve,

I have just received your letter in whose contents I was much interested, especially the rumour about Barnes.¹ I am not surprised that Walton is pulling out for good.² I think they found it a little lonely in Montreal when so many of their friends departed.

I saw the name of R. Boyle in the list of survivors of the *Empress of Ireland* and telegraphed Barnes to know if our friend was all

right. His reply was such that I do not yet know whether Boyle was on board or not.³ I know it was about the time that Boyle was intending to sail. I expect, however, that I shall see him personally about the time you get this letter.

You mentioned that you suggested to Peterson that he should offer sufficient bait to catch a whale; but you will have to be sure that it is a "right whale." The difficulty is at the moment that there are few heavy weights available in Physics between the ages of 30 and 40. There was a period of from five to ten years in which few people of promise emerged. I think your best chance would be to try and get one of the promising young fellows, for example, Geiger,⁴ Moseley⁵ or young Bragg.⁶ The last two are, in my opinion, the coming people in this country. They are, of course, somewhat lacking in experience, but they have even more than I had when I went to McGill. Young Bragg is going to get his Fellowship at Trinity and has recently been made a sort of Director of Scientific Studies in that College. Moseley is in some respects the most promising of all and a fine fellow. He is making the Australasian tour with his mother this summer and will pass through Montreal in about a fortnight's time. I expect he will call at the University and I suggest you give Peterson a chance to look at him. I will give him a letter to you. He is travelling in a few days' time and was intending to go by the return trip of the *Empress of Ireland*. Another fairly promising youngster is Marsden, who is Lecturer and Research Assistant in my Department. He is a good experimenter, but is not so strong, I think, as either Bragg or Moseley. Of course, King of your Department is really a first class man, but I can quite understand the difficulty in giving him a more responsible post.⁷

By the way, did I pay you for the telegrams I sent from Montreal? If I did not, please subtract the amount from the next interest you send me.

Give my remembrances to Joan and Dick and your lady. I have, of course, been kept very busy since my return.

Yours ever,
E. Rutherford

R-29 Notes

1. Eve's letter was that of 18 May 1914 (E-29). See Note 5 of that letter for "the rumour about Barnes," i. e. Barnes' proposed move to British Columbia.
2. See Note 3 of letter E-29.
3. Robert W. Boyle was Professor of Physics at the University of Alberta. Previously he had worked with Rutherford at McGill and had obtained his PhD there in 1909. He then moved to Manchester, where his research was mainly on the properties of radium emanation (radon). The Alberta appointment came in 1912. It seems that Boyle was not on the *Empress of Ireland*. In a letter to Rutherford dated June 2, 1914 (which had clearly not yet arrived when the latter wrote on June 4), Barnes wrote: "I received your cable about Boyle and replied that he was safe. Boyle was here for a meeting of the Royal Society [of Canada] last week and left for Boston from which place he sailed."
4. Geiger: See Note 5 of letter R-9 and Note 10 of letter E-29.
5. Moseley: See Note 5 of letter R-20.
6. Young Bragg, i.e. William Lawrence Bragg: See Note 3 of letter R-20.
7. Louis King was a brilliant physicist but it seems that he was emotionally unstable. In letter R-24 (23 June 1913) Rutherford referred openly to "his breakdown before." Earlier, on 30 September 1912, Barnes wrote to Rutherford: "I have been troubled about King. He has shown signs of returning trouble and while I think it will be a long time possibly before it develops it would be better for him to make a change ... Could you offer him a post—he would be much happier working with you as he evidently thinks himself too large for us" (Cambridge University Collection). Rutherford did not offer King a post, but in June 1913 he was promoted to Associate Professor at McGill (see Note 6 of letter R-24).

R-30 Rutherford to Eve

17 Wilmslow Road
Withington, Manchester
June 15, 1914

Dear Eve,

I enclose herewith the formal receipt for your draft of £12.15.8.

Before the receipt of this letter you will probably have seen Moseley in Montreal. I am sure you will find him a good fellow.

I heard personally from Barnes that he was going to Vancouver, and have written to him about the matter. I think on the whole that it is a wise step, for I think it will be a good thing for him to get away from Montreal and make a fresh start elsewhere.¹ I shall, of course, be very glad to help you in any way I can in trying to get a suitable man, or men, to take his place.

We are leaving in a fortnight's time, and I am in the midst of Examinations, and I feel that I have very much to do before I leave.

It is rather amusing that the same formula as Walker's was found so long ago.² I would certainly inform Walker and Larmor of the fact.

We have just had Boyle with us, he is in excellent form. We are all well.

With kind regards,

Yours sincerely,
E. Rutherford

P.S. [Added by hand] I hear today Rachel Core [?]³ is to be married in a day or two—the other person is unknown to me.

R-30 Notes

1. Barnes' letter to Rutherford of June 2, 1914, announcing the proposed move to Vancouver was cited in Note 5 of letter E-29. The letter also stated: "I shall be much better of [in the new post] as to salary and funds for apparatus...I hope you will approve of the change for I did not have a suitable chance to discuss it with you." As mentioned in the same Note, in the event Barnes did not move to B. C. but remained as Director of Physics at McGill until 1918.
2. See Note 7 of letter E-30.
3. I am unable to determine the exact name and to identify the lady concerned. She was

Chwolson's Letzbed der
Physik. It was obtained
by a Russian in 1888!

That is a joke or Larmon
& Walker.

Good luck to you all
in your trip.

We love Dr & Mrs
Barlow, he was a geologist,
on the ill fated Empress
with kind regards to
you & Mrs Lady Rutherford
from all four of us

Your very sincerely
A. S. Eve

860 St. Catharines Road

Canterbury

France

3.6.14

Dear Rutherford,

I send the enclosed

draft, which will cost you
a certain amount. I am
inventing a new word "radiant"
for "radioactive substance"

There then are about 3
radiants. Polonium is
a radiant, etc. Try it.

We are just back from
Tennis at the Pitches

Please acknowledge
draft

My Dear Eve... The Letters of Ernest Rutherford to Arthur Eve

Figure 6. First and last pages of a letter (E-30) from Eve to Rutherford dated June 3, 1914.

presumably known to Eve as well as to Rutherford.

Acknowledgements

I am grateful to Prof. Ferdinand Terroux, the first Curator of the Rutherford Museum at McGill University, for drawing my attention to the existence of the letters discussed in this article; to Mr. A. E. B. Owen, Keeper of Manuscripts at Cambridge University Library, for supplying photocopies of the letters from Eve to Rutherford; to the Syndics of Cambridge University Library for permission to quote from these letters; and to the staff of the McGill University Archives and Libraries, in particular Mrs. Phebe Chartrand and Mr. Marcos Silva for assistance well beyond the call of duty in searching for obscure facts and explanations. Finally I wish to thank Professors William Shea (McGill University) and Lawrence Badash (Professor of History of Science at the University of California) for reading the manuscript of this article and making helpful suggestions.

The McGill University Collection of Greek and Roman Coins: New Evidence for its History

by Richard Virr, Barbara Lawson, G. Michael Woloch and Franziska E. Shlosser

Although most of McGill's collection of classical coins has been catalogued and published, the origin of the collection itself, has, until now, defied explanation. This article reconstructs the history of the collection by examining the numismatic holdings of the Natural History Society of Montreal (1827-1925), random coin donations over the years to McGill University and to the University Library. This research also sheds light on the rather mysterious connection between a coin collection belonging to Margaret Murray (d. 1927), wife of McGill professor of philosophy John Clark Murray, and the collection of the University's Principal, William Peterson. The article concludes with a survey of the coins now comprising the collection, and of their vital and valued contribution to teaching and research activities at McGill.

Même si l'essentiel de la collection de pièces anciennes de McGill a été cataloguée et publiée, son origine a jusqu'à aujourd'hui défié toute explication. Cet article reconstruit l'histoire de la collection en examinant le fonds numismatique de la Natural History Society of Montreal (1827-1925) et les collections de pièces données à l'Université McGill et à ses bibliothèques au fil des ans. Cette recherche éclaire également d'un jour nouveau le lien plutôt mystérieux qui existe entre les collections numismatiques de Margaret Murray (d. 1927), épouse du professeur de philosophie de McGill John Clark Murray, et la collection du principal de l'Université, William Peterson. Cet article donne également un aperçu des pièces qui font désormais partie de la collection et du rôle précieux qu'elles ont joué dans les activités d'enseignement et de recherche à McGill.

McGill University has a collection of about 2100 classical, antique and oriental coins, of which some 1764 have been identified. This collection illustrates most of the important areas of Greco-Roman numismatics. The major part of the collection was found in 1966 in a box when the University's McCord Museum of Canadian History was being moved to new quarters. This box was typical of those used for storing coins in the early part of this century. The collection was turned over to the Classics Department, and a preliminary classification of the coins was made by the late Professor Colin D. Gordon in 1966. The next year, 1967, the collection was moved to the Redpath Museum, and a grant from the Quebec Ministry of Education in 1975/1976 helped provide appropriate storage. Since

1979, the Curator of Ethnology, first Kathleen Zahn, and now Barbara Lawson, has been responsible for the collection. In 1981, G. Michael Woloch and Franziska E. Shlosser were appointed joint honorary curators.

Most of the collection has been described in a three volume catalogue published between 1975 and 1984¹. The general editor is Professor G. Michael Woloch of the Classics Department. Volume I, dealing with the Roman coins, contains two sections: the main part by D.H.E. Whitehead, and a supplement, by Vivien Law, of coins wrongly sorted in 1971. Volume II, treating the Greek gold and silver coins, is by Professor Franziska E. Shlosser of the Department of History, Concordia University, Montreal. She is also the author of Volume III which describes the Greek

The McGill University Collection of Greek and Roman Coins

bronze coins and the bronze Greek coins of the Roman Empire as well as some silver coins and some Judean and Indian coins. Volume III also contains a second supplement of Roman coins by L. Cass-Conrad. The three volumes are richly illustrated with 25 plates in Volumes I and II, and 28 in Volume III. Volume II follows sylloge format with photographs of all of the coins described. In the preparation of the catalogue, assistance with the format was provided by the curatorial staff of the American Numismatic Society.

When Volume I of the catalogue was published in 1975, the origins of the collection were obscure.² Most of what was then known was based on Professor Shlosser's McGill M.A. thesis of 1971. However, new information has been discovered and some old information reassessed, and it is now possible to reconstruct, at least broadly, the origins of the collection. This essay includes a preliminary cat-

alogue of gifts of coins over the years to the Natural History Society of Montreal and to McGill University, a history of what would now appear to be the core of the McGill collection and a description of the collection itself as it now exists.

NUMISMATIC HOLDINGS OF THE N.H.S.M. (1827-1925)

The Natural History Society of Montreal (N.H.S.M.), founded in 1827, was the earliest scientific organization in Canada and among the first established in North America.³ The Society maintained a museum, which included zoological and botanical specimens, and also minerals. In addition to the natural history holdings, the museum also received donations of ethnological objects and coins. After years of fluctuating fortune, the Society disbanded in 1925 and its collections were divided among the McGill University libraries and museums.

Date	Description of Donation	Locality	Donor
1830 Feb. 23	A silver coin A copper coin	Rome Rome	Rev. E. Parkin
1831 Nov. 28	Seven copper coins	Roman	Mr. R. Wier
1832 Dec. 31	A small silver coin	Rome	Mr. J. Brown
1832 Dec. 31	A Vespasian or Domitian coin	Rome	Mr. Grant
1833 Oct. 28	A copper coin	Rome	Rev. J. Bethune
1833 Nov. 25	Five coins (one of Maximilian)	Rome	Mr. J. Rattray
1833 Dec. 28	Three copper coins (one of the Emperor Nero)		Mr. A.H. Armour
1835 Aug. 31	Two copper coins	Rome	Mr. J.V. Browne
1835 Aug. 31	One copper coin of the reign of Vespasian	Rome	Mr. H. Youle
1836 Apr. 25	One antique copper coin	Herculaneum	Dr. A.H. David
1837 Apr. 24	Eleven silver & copper coins	Grecian & Roman	Mr. Alex Buchanan
1837 May 18	Fourteen silver coins & forty-eight copper coins. Many rare and valuable being ancient.	Grecian & Roman	Mr. Alex Buchanan



Nero, Mint of Rome, Sesterce, A.D. 64-66. (McGill, I, 18).
obverse: NERO CLAVD CAESAR AVG GER PM TRP IMP PP
Bust laureate with aegis.
reverse: [AUG-VSTI]-S-PQR-OST-C
Bird's eye view of harbour of Ostia.

A list describing the distribution of this material mentions a box of coins sent to the Redpath Museum.⁴ The register of the Natural History Society of Montreal⁵ includes approximately 140 donations of coins, representing donations by approximately 100 different individuals, totalling close to 1000 coins (average entries are for 5 coins or less). Of these, some 660 are described as copper, 3 as brass, 180 as silver, and 3 as gold.⁶ Over 300 coins have a European provenance, the greatest representations being from England and France as might be expected.

The table lists the only donations to the N.H.S.M. designated as Greek or Roman (97 coins in all). It should be noted that entries are often ambiguous regarding the age of coins and the term "ancient" is used inconsistently throughout the N.H.S.M. register. This list may, therefore, include some non-classical examples. As close to 500 coins have no provenance indicated, it is quite probable that classical coins were among those described as "ancient" or included in generalized entries such as "four silver coins".

NUMISMATIC HOLDINGS OF MCGILL UNIVERSITY

The earliest records of donations to McGill University are included in the University's annual reports, however, only large or otherwise significant gifts are noted in detail. For example, 18 Roman coins presented by Mr. E.T. Hemmings are mentioned in an early listing of material donated to McGill University.⁷ However, it is conceivable that there were several random donations of one or two coins, similar to those made to the N.H.S.M., that received no notice.

The records of the University Library mention at least two gifts of coins. Unfortunately, these, like the N.H.S.M.'s records, usually provide very little information. In 1919, the wife and the daughter of the late Reverend Canon Thomas Musson (1832-1901) presented to the Library some 38 volumes of early printed books, over 110 early engravings and "a cabinet of coins, chiefly Canadian and Roman." Most of this material had been acquired by Musson during travels in Europe

in 1858 and 1859. The coins are further described as being "numerous, and including . . . many Roman and Canadian specimens; but containing a goodly number of British and other examples as well." No other information has been found concerning these coins; they are not now in the collection of the University Library.⁸ In 1933, the Library received a collection of 15 Greek coins in a case from Mrs. Walter Frewen Lord.⁹ As with the Musson coins, no further information has been found and these coins are not in the Library collections.

Gifts of coins also appear in the register of McGill's Redpath Museum. Although the Redpath's holdings were primarily focused on natural history materials, ethnological and archaeological artifacts were included among the earliest donations to the Museum. A large numismatic collection belonging to Rupert E. Kingsford, was presented to the Redpath Museum by his widow in 1922.¹⁰ The Kingsford Collection included 1397 coins of various date and provenance. The classical component of this large donation consisted of 66 Roman republican Denarii.¹¹ There are two later entries in the Redpath Museum's register that mention coins: one, a donation by Miss Mary V. Dunlop on 14 April 1939 including "coins" with pressed plants, minerals, and insects to be added to the Barnston Collection; the other entry, dated 8 December 1941, consisting of "7 frames, medals, coins, etc." from the Estate of M. Jérôme Côté (a note in the margin reads "for McCord").¹² There were also donations of coins to McGill's Ethnological Museum, including a collection of 124 Asian coins presented by the widow of Dr. Arthur Willey in 1944. These coins presumably became part of the University's miscellaneous numismatic holdings when the Ethnological Museum was closed in the late 1940s.

THE MURRAY-PETERSON COLLECTION

In the preface to volume one of the catalogue of the McGill coin collection mention was made of the collection of coins belonging to Mrs. Clark Murray.¹³ As pointed out there, "the contents of Mrs. Murray's collection are at least partially consistent with those of our collection." However, the subsequent state-

ment that "Mrs. Murray's claim on the collection was of tenuous validity" has no basis in fact. New information now makes it possible to elucidate at least some of the mystery surrounding Mrs. Murray's coin collection and its relationship to the McGill collection.

Margaret Polson Murray (d. 1927) was the wife of John Clark Murray, McGill professor of philosophy. Her greatest claim to fame is that of founder, in 1900, of the Imperial Order Daughters of the Empire. Some time in the early 1890s, she acquired a collection of coins and Russian medals. A copy of the ten-page rudimentary catalogue that she had printed bears the rubber-stamped date of Jan 20 1894.¹⁴ Where Mrs. Murray acquired this collection has not been traced, but the collection would seem to have been a Montreal, or, at least, an eastern Canadian one, as it was known to Montreal numismatists such as R. W. McLachlan.¹⁵ A brief summary of the contents of the collection as listed in this catalogue will be helpful. There were 15 Greek gold, 60 Greek silver and 178 Greek copper coins; 8 gold Byzantine, 9 silver Byzantine and 49 copper Byzantine coins; 34 silver Asiatic, 31 copper Asiatic coins and 1 glass coin; 7 Roman gold, 26 Roman silver, 137 Roman Imperial silver, 362 Roman copper and 112 Roman half-silver coins; and finally, there were 489 Russian gold, platinum, silver and copper coins and 52 silver and bronze Russian medals. That is, a total of 1518 coins and 52 medals.

For reasons that are not at all clear, Mrs. Murray found herself in financial difficulties in the early years of this century and appealed to Principal William Peterson of McGill for help.¹⁶ As recorded in the Peterson Letterbooks, the story begins on 29 March 1902 with the following letter to the Chancellor of the University, Lord Strathcona, then Canadian High Commissioner in London:

An excellent opportunity presents itself of doing something for Mrs. Clark Murray, and also acquiring something of permanent value in return. Mrs. Murray has just sent me the catalogue of a very remarkable collection of coins which she possesses, and with the history of which I am fully acquainted. The

collection numbers some 2000 in all, — Greek, Roman, Asiatic, Byzantine, and Russian; gold, silver and copper. It could be very serviceably used in connection with the teaching of History, and as McGill possesses absolutely nothing of the kind, it would be a valuable addition to our equipment. I enclose a note in which Mrs. Murray tells me that she would like to have \$2500. I have no doubt that the collection, if examined by an expert, might be considered to be worth that figure, but as I happen to know the peculiar circumstances under which it was acquired some ten years ago for a considerable smaller figure, I am quite disposed to think that if I am empowered to offer, say, \$2000, it could be secured, while Mrs. Murray would at the same time be benefited by an immediate and easy sale. I make this suggestion to you with some diffidence, but short of paying out money to Mrs. Murray by way of financial assistance, I do not think that I can make any better suggestion.¹⁷

The catalogue mentioned by Peterson is undoubtedly the one described earlier. Unfortunately, in no place does Peterson record the history of the collection. In a letter to Mrs. Murray of the same date, Peterson wrote, "I am much interested in the collection of coins, of which I had heard a great deal previously from Professor Moyses."¹⁸

On 15 April 1902, Peterson made a conditional offer to Mrs. Murray of \$2000 for the collection, subject to an examination by an expert, if it included the numismatic books that she had acquired from the collection's previous owner. The expert was the well-known Montreal numismatist R. W. McLachlan, and he examined the collection on 17 April.¹⁹ The same day, Peterson wrote to Mrs. Murray as follows:

I have been over your collection of coins to-day with an expert from the Chateau de Ramezay and another friend, and regret to say as the [sic]



Galba, Paduan (?) forgery, Sesterce. (McGill, I, 21).
obverse: ·IMP·SER·SVLP·GALBA CAES AVG TR·POT·
Bust laureate.

reverse: SC (l. and r. in field) ADLOCVT (in exergue)
Signiferi being addressed by emperer.

result that, though I may be able to find some other method of assisting you, I am compelled to withdraw the conditional offer which I made of \$2000 for the collection. I am afraid you will be surprised to hear that many of the most valuable things seem to have disappeared: for example there are only 7 gold Greek coins, instead of 15; only one Roman gold coin, instead of 7; while half of the Russian gold collection has entirely disappeared. There are, of course, a good many counterfeits in the collection, as is very commonly the case. Both the gentlemen who were with me to-day knew it before you acquired it, and miss some features of it which used to be prominent. For example, there is only one of the Russian silver bars, and the Greek collection strikes them as not being what it was originally. Among other disappearances I may note nearly half the unclassified silver Greek coins; a large number of the Asiatic silver coins; nearly half the Imperial silver coins; and the earliest of all the Russian silver coins.

Peterson concluded by asking Mrs. Murray to call at his office if she should wish to do so.²⁰

The next day, 18 April, Peterson wrote to Lord Strathcona, "I have come to the conclusion that it [the coin collection] is not worth more than \$500."²¹ And he offered Mrs. Murray that sum for it. This offer was repeated on 7 May, but the tone of the negotiations was becoming acrimonious.²² However, on 20 May, Mrs. Murray accepted the offer of \$500 for the collection.²³

This correspondence suggests that Peterson bought Mrs. Murray's collection of coins himself, for \$500, but, as part of a financial package worth \$2500, largely, if not entirely, paid for by Lord Strathcona. The \$2000 was, presumably, to help cover the losses that Mrs. Murray claimed she had sustained on behalf of the University. However, there is a small problem with Peterson's purchase. In 1903, the affair had not yet reached its final settle-

ment. On 13 April, Peterson wrote to Mrs. Murray:

I do not know that I ought to be asked to take this matter up again, but if you are now prepared to sign the enclosed receipts, and will forward them either to Dr. Barclay or to me, I shall arrange to pay the sum of \$2500 on behalf of Lord Strathcona, as previously promised. You will note that in the second receipt I use the phrase "the balance of the collection," as it no longer corresponds, as you are aware, to the printed catalogue.²⁴

So the question remains, Who paid for the coins? Peterson? or Strathcona? As subsequent events will show, Peterson possessed them, and, as a classicist of some renown, the collection would have had a certain interest for him. But here, the coins disappear from sight for almost thirty years.

In 1930, William Gordon Peterson, the eldest son of the Principal and a classicist like his father, wrote in a post script to a letter dated 25 January:

I take this opportunity of stating that, pursuant to my Father's wish, my will leaves to McGill his collection of coins (classical and modern). Also some classical gems. As I collect these things myself, this collection will finally come to the University greatly augmented. My father knew that, otherwise he would have left it at once, on his death.²⁵

The younger Peterson died later in the same year on 3 October. A general description of this collection—unfortunately, no other exists—was prepared to settle the estate by Albert Woodhouse, Dealer in Antique Gems, etc., 56 Carey St., Lincoln's Inn, London on 27 January 1931.²⁶ He described a miscellaneous collection of classical and modern coins and medals. Of particular interest are the "53 Russian Medals in silver and bronze mostly in Covers with descriptions, War, Police, Commemoration etc." Mrs. Murray's catalogue

listed 52 Russian medals. In addition, there is a "collection of Russian silver and copper coins in 11 Trays, Early to recent periods."²⁷ But of even greater importance are the following entries:

A polished oak Coin Cabinet with 23 Trays, containing large Collection of Early Roman silver & bronze Coins periods B.C. 520-400 etc., including 1 gold, in No. 8 Tray[.]

A walnut Box with 12 Trays, containing A collection of Byzantine Coins including 7 gold in 4 Trays. [Mrs. Murray's catalogue lists 8 gold Byzantine coins.]

A small mahogany Box, containing numerous Roman & Greek Coins[,] some brass & bronze Medals[,] 1 Oriental gold coin[,] all in paper covers[.]

A cedar-wood (Cigar) Box, containing 66 small Grecian Coins in covers with description[.] A quantity of loose copper coins.

These four groups are all described as "ancient" by Woodhouse. Unfortunately, he gives no count for these various categories of coins.

The bequest of Lieut-Col. Peterson was duly received at the University, and the Curator of Museums, E.L. Judah, reported to A.P.S. Glassco, the Secretary of the University, that the collection, including the antique gems, had been unpacked and examined. Leo Renault, Curator of the Numismatic Collection of the Chateau Ramezay, considered the Greek coins to be the finest collection in Canada at the time. The Russian collection also was considered significant. Judah concluded his report by saying, "This whole collection should be insured for \$8000.00, under the 80% co-insurance clause, as it might be difficult to replace it for \$10,000.00."²⁸

This important bequest was reported in *The McGill News*:

A valuable collection, composed of thousands of platinum, gold, and silver coins, collected by the late Sir

William Peterson, and by his son, the late Lieut.-Col. W.G. Peterson, has reached the University, to which it was bequeathed in Col. Peterson's will. The oldest coin was minted approximately 2,700 years ago; and the most valuable are Russian coins made of platinum. In addition to coins, the gift includes a collection of antique carved gems, collected from many lands over a long period of years. It is hoped that, after classification has been completed, the collection will be placed on view this summer.²⁹

However, it would seem that the collection was not put on display. The report of Cyril Fox on the McGill museums, 1932, does little but note the existence of the Peterson coin collection, and that it had not been assigned to any museum.³⁰

A list of McGill's numismatic holdings prepared c. 1932,³¹ perhaps for Fox's museum report describes coins and medals from the late Colonel Peterson, the late J.H.R. Molson, the Rawlinson Collection, "together with many small donations that are of very little use."³² In addition to various medals, this list provides a few details regarding the holdings of British, foreign, and ancient coins at the McCord National Museum. The material described includes:

The Roman collection. Not classified. Many forgeries in this collection.

A very fine collection of Greek silver coins [presumably the collection of Tarentine coins now in the Redpath Museum]. Not many type specimens but a large number of die varieties

A small lot of Greek [b]ronze coins. Never been looked over.³³

And here the University's collection of classical coins disappears from view until its reappearance in 1966 in the old McCord Museum as described in the published catalogue.³⁴ There can be little doubt that the Murray-Peterson collection forms the core of the pres-



Alexander III, 336-323 B.C., Tetradrachm. (McGill, II, 49).
obverse: Head of Heracles in lion-skin; cut across the top of the head.
reverse: Zeus seated on throne.

ent McGill collection. It is this collection that is "the private collection of a single individual of substantial income who maintained a fairly serious interest in classical numismatics" as posited in the catalogue.³⁵

CLASSICAL COINS AT MCGILL UNIVERSITY CIRCA 1966

In 1966, when Professor Gordon tallied the coins that had been found in a box in the McCord Museum and passed on to him, he recorded the following: 766 Greek, 921 Roman, 111 Uncertain, 35 Foreign, totalling 1833 coins.³⁶ Gordon's observations regarding the coins he examined were noted as follows:

The classical coins displayed a few traces of having once been organized. A number of the coins were accompanied by small paper discs on which was written certain information, though evidencing no particular plan. The discs sometimes bore a description of the individual coin, sometimes the legend, occasionally a Poole^[37] number (presumably a reference to the early catalogue of British Museum coinage); on a few a sum of money is written, in pounds sterling, possibly the price paid for the coin.³⁸

Further analysis of the coins now housed in the Redpath Museum has added several details to Gordon's comments. A tally of the coins indicates a total of approximately 200 labels; 126 affixed to the cardboard frames enclosing each coin, plus more than 80 detached discs. The vast majority of these (i.e. 150 or 3/4ths of the total) describe Tarentine coins, of which there are a total of 215 in the collection at the present time. The proportionally large number of Tarentine labels suggests a specialized collecting interest, perhaps corresponding with the assessment of the "very fine collection of Greek silver coins" mentioned in the report on McGill's numismatic holdings.³⁹

Several factors suggest that Peterson was responsible for the development of this particular component of the collection. Murray's collection, purchased by Peterson in 1903, was not notably strong in this area. That collection

included a total of 60 Greek silver coins, only one of which was Tarentine.⁴⁰ It is also unlikely that the Tarentine coins were passed on from the N.H.S.M., as even the vague entries in the Society's register of donations would have given some indication of a collection of this nature. Finally, a disc label on one Tarentine didrachm (acc.80.02.80), indicates that the coin was purchased at a sale of Greek civic and regal coins held at the London auction house of Sotheby, Wilkinson & Hodge in January 1914.⁴¹ This suggests the continued development of the collection after it was purchased from Mrs. Murray in 1903.⁴²

Gordon noted the paper disc labels as being the work of two different hands.⁴³ They have also been taken as possible indications of the work of two different collectors.⁴⁴ A comparison with labels at the Royal Ontario Museum known to be from the London numismatists, A.H. Baldwin & Sons, Ltd., led to further inquiries which confirmed that most of the labels were written by staff members of Spinks and Baldwin & Sons during the first half of this century.⁴⁵ This information supports the argument for a single collector with a specialized interest in Tarentine coins, rather than a multitude of collectors coincidentally sharing the same specialization. Most probably, this collector was Principal Peterson.

In spite of the tortuous path travelled by many of the coins described, classical coins from all of the sources treated here, now form McGill's Collection of Greek and Roman coins.⁴⁶

THE COLLECTION TODAY

The collection of Roman coins consists of 848 pieces and is a well-varied one, representing nearly all time periods and mints. Both Republican and Imperial coins are present, and most regions of the Empire represented. The earliest coins date from about 320 B.C. and the latest from A.D. 527–538. The greatest number of coins (90) come from the reign of Constantine I (A.D. 306–337). Other large concentrations include those of Probus (A.D. 276–282) 64; Diocletian (A.D. 284–305) 55; Gallienus (A.D. 253–260) 48; Maximian I (A.D. 285–305) 38; Antoninus Pius (A.D. 138–161) 34; Augustus (27 B.C.–A.D. 14) 29;



Syracuse, Tetradrachm, about 474-450 B.C. (McGill, II, 46).

obverse: Quadriga driven by male figure; Nike flying overhead, about to crown horses with wreath.

reverse: ΣΥΡΑΚΟΣΙΟΝ

Head of Arethusa surrounded by four dolphins.

Constantius II (ruled 337–361, coins 326–361) 28; Constantine II (ruled 337–340, coins 311–341) 23; Hadrian (A.D. 117–138) 22; and Trajan (A.D. 97–117) and Marcus Aurelius (A.D. 161–180) 21 each. The collection includes a number of forgeries, both ancient and modern including at least one Greek and several Roman examples of the work of the notorious, but gifted, nineteenth-century German counterfeiter, Carl Wilhelm Becker (1772–1830).⁴⁷

The ancient Greek coins comprise 316 silver, four gold and four electrum ones, plus the bronze ones. The largest number of coins from the same region is 213 silver coins from Tarentum, situated in the instep of the Italian boot. On account of their relatively large number, they can be considered the most significant part of the Greek collection. The rest of the coins are from the Greek mainland, Magna Graecia in general and the Hellenistic kingdoms. A small number is from Persia.

As can be expected in a collection of such variety and diverse provenance, the quality of the coins ranges from very good to poor. This is particularly apparent in the collection of bronze coins. If, however, the collection is sometimes lacking in fine specimens, it makes up for this lack by its greater variety. The Greek bronze and Imperial coins total 592 pieces, including coins from Palestine ranging from the Hasmonean Dynasts to the Bar-Cochba War and the provincial cities under the Romans.

There are a number of interesting forgeries among the Greek coins. The most significant of these is a gold stater of Seleucus II made by the counterfeiter Becker.⁴⁸ There are, as well, some ancient forgeries, and Celtic imitations of the coins of the Macedonian kings.

In addition to the coins received by Gordon in 1966, McGill's Faculty of Religious Studies supplemented the University's numismatic holdings in 1978 with the donation of 259 Greek, Greek Imperial, Byzantine, Jewish, Islamic and other coins as part of the R.B.Y. Scott Collection of Near Eastern Antiquities. Of these, 102 coins have been identified and catalogued. Recent donations include one Roman Empire coin (acc. 85.02.01), struck in

the East. This coin was brought from Egypt by Mrs. Charles Adams and donated to the collection by Professor Stanley Frost. An electrolyte of an Athenian decadrachm (acc. 88.03.22), presented by Mrs. Germaine Deichmann, was added to the collection in 1988. In 1990, 19 oriental coins of various provenances were transferred to the Redpath Museum from the Department of Rare Books and Special Collections (acc.90.04.01-19).

Publication of the catalogues, which were widely and favourably reviewed, has enabled collectors and scholars to access what is in the McGill collection and to study coins appropriate to their work. Both photographs and casts of the coins can be provided: M. Amandry, Conservateur of the Cabinet des Médailles in Paris, used casts in his recent work.⁴⁹ However, the collection is primarily a teaching one, and its best use is for instruction in university courses and for thesis research. A course on Greek and Roman numismatics, using the coins as ancient sources, has been taught from 1975 by Professor Woloch. It was last taught in 1989/1990, and is planned for 1992/1993, in conjunction with an exhibit of electrolytes, "Rome and the Germans as Seen in Coinage," at the Redpath Museum. The coins have been used for class exhibits in courses on ancient history and Latin civilization, and they have been used by students writing B.A. and M.A. theses.

Moreover, other research on the coins continues. In 1976 a series of analyses was carried out by M. Attas⁵⁰ to measure the silver content of some of the Tarentine coins. This group was chosen because it represented a range of coin types from ca. 500 B.C. to the Hannibalic occupation of 212–209 B.C. X-ray fluorescence (XRF) was used, and the general conclusion was that the coins had not been devalued, even during the uncertain times of 212–209 B.C. In 1985 a second series of analyses was undertaken by H. Marshall using proton activation analysis (PAA). There were several reasons for undertaking a second analysis. First, XRF determines the elemental composition in a thin surface layer, and this could result in certain errors since the composition at the surface of a coin might differ from that of its core. Second, only copper was determined quanti-

tatively by XRF, and it would be of interest to know the percentage of other metals, such as gold, in the coins. Finally, the values obtained by PAA could be used as a check. The copper values obtained by Marshall were somewhat higher (about 10%) than those obtained by Attas. T. Saavedra is presently (1990) reviewing and comparing this previous work for a B.A. Honours thesis in Classics.⁵¹

Since the McGill collection of Greek and Roman coins was rediscovered and first studied in 1966, questions inevitably have arisen regarding its origins. In this essay, we have used new research and a re-examination of information already known to outline what we believe to be the principal sources of this collection. Our reconstruction of the history of the collection restores to the University a part of its heritage, too long forgotten, and records the names of the many donors who have contributed to the formation of this collection as it exists today. Not only is it important to recognize the significance of the large donations of coins such as the Peterson and Scott ones, but it is of equal importance to recognize that the many donations of single coins and small numbers of coins, first to the Natural History Society and later to the University, have also enriched the collection. The history of the McGill coin collection is typical of that of many collections: periods of obscurity followed by periods of great interest; of small donations and of major gifts; and of a history to be reconstructed.

Notes

The authors would particularly like to thank Eunice Tees, Phebe Chartrand, Warren Baker and Peter Mitchell for their assistance with and interest in this research project and Jeff Campbell, Janet Kelly, Leilah Nadir, and Susan Wade for their assistance with the coin tallies.

1. Michael Woloch, gen. ed., *The McGill University Collection of Greek and Roman Coins*, Vol. I: *Roman Coins in the McGill University Collection*, by D.H.E. Whitehead; Vol. II *Greek Gold and Silver Coins in the McGill University Collection*, by Franziska E. Shlosser; Vol. III: *Ancient Bronze Coins in the McGill University Collection*, by Franziska E. Shlosser. Amsterdam: B.R. Gruner Publishing Co., 1975, 1984.

2. John Sullivan, "The History of the McGill University Coin Collection," in Whitehead, iii.

3. For an historical overview of the N.H.S.M., see Stanley Frost, "Science education in the nineteenth century," *McGill Journal of Education*, vol. XVII, no. 1 (1982), 31-43.

4. N.H.S.M., "Natural History Society's Inventory, March 7, 1906 [-1925]," p. 16 of distribution list. On file, Rare Book Collection of Blacker-Wood Library, McGill University.

5. N.H.S.M., "General Registry Book of Donations to the Natural History Society [1827-1854, 1895-99]." Written up to 1852 by Alexander George Lachlan; continued from 1852 to 1854 by Librarian; continued from 1895 to 1899 by J.B. Williams, Curator. Acc. 297961, Rare Book Collection of Blacker-Wood Library, McGill University.

The "Minutes of the Natural History Society [of] Montreal [1858-1888]" were examined for coin donations of the period not covered by the registry book. (Acc. 269043, Rare Book Collection of Blacker-Wood Library, McGill University, Montreal.) Although there may have been a few coins donated during the periods for which there are gaps in the records, i.e. 1854-8 and 1888-95, these would have been minor donations. Mention of significant donations occurring during these undocumented periods were carried over to later records.

The McGill University Collection of Greek and Roman Coins

6. A comparison of this count with one noted in 1830, indicates that almost a third of the coins held by the N.H.S.M. at the turn of the century had been donated within the first three years of the Society's existence. *Third Annual Report of the Natural History Society of Montreal* (Montreal, 1830), 7-8.
7. *Calendar of the McGill University*, (Montreal, 1863), 31. This publication includes donations to the University from 1856 to 1863.
8. Quarterly and Annual Report of the Librarian, 1917-1920, and Minutes of the Library Committee, 10 February 1919, vol. 3, p. 159. McGill University Archives, M.G. 40. A superseded text of the report contained this phrase: "the most important section of them (the coins) are of Roman and Canadian origin."
9. Minutes of the Library Committee, 11 April 1933, vol. 6, p. 8 McGill University Archives, R.G. 40. As with many of the coins mentioned in the N.H.S.M. and other records, there is no indication whether these were ancient or modern examples.
10. Redpath Museum. "Donations to Peter Redpath Museum [1907-1947]," entry for April 24, 1922, pp. 71, 79. Acc. 89-052, McGill University, Archives.
11. Sullivan, v.
12. Redpath Museum, "Donations," 109, 118.
13. Sullivan, vii.
14. Mrs. Clark Murray, "Catalogue of a rare and valuable collection of coins and of Russian medals." Printed catalogue, undated, Montreal, 9 pp. A photocopy of this catalogue, kindly supplied by Warren Baker, is now in the files of the Ethnology Collections of the Redpath Museum, McGill University. No original of the catalogue has been located. Copies of all the letters cited in this article also are in the files of the Ethnology Collections of the Redpath Museum.
15. Letter of 17 April 1902 to Mrs. Clark Murray from Principal William Peterson of McGill. Peterson Letterbooks, McGill University Archives, R.G. 2.
16. Mrs. Murray's financial problems may well have been related to the unsuccessful University Club for students that she organized in 1895. Stanley B. Frost writes, "Peterson was reporting at the end of the session [1898-1899] that Mrs. Murray had lost money on the operation of the club, but the board of governors declined to come to her rescue, and in October 1899 the principal announced its closing with a heavy deficit." *McGill University. For the Advancement of Learning*, vol. 2. (Montreal: McGill-Queen's University Press, 1984), 20. Additional difficulties may have been due to the lack of pensions for McGill professors. Her husband, John Clark Murray, was to retire in 1903. See the correspondence cited in the next note.
17. Peterson Letterbooks, McGill University Archives, R.G. 2. The following letters are important: 29 March 1902 to Lord Strathcona, 29 March 1902 to Mrs. Murray, 15 April 1902 to Mrs. Murray, 17 April 1902 to Mrs. Murray, 17 April 1902 to R.W. McLachlan, 18 April 1902 to Lord Strathcona, 25 April 1902 to Mrs. Murray, 5 May 1902 to Mrs. Murray, 7 May 1902 to Mrs. Murray, 12 May 1902 to Mrs. Murray, 12 May 1902 to Mrs. Murray, 20 May 1902 to Lord Strathcona, 3 April 1903 to Dr. Barclay, 13 April 1903 to Mrs. Murray and 26 January 1904 to Judge Archibald. Unfortunately, Mrs. Murray's letters to Peterson do not seem to have survived.
18. Charles E. Moyse (1852-1924) was Molson Professor of English Language and Literature at McGill at this time.
19. Letter to R.W. McLachlan from Peterson, 17 April 1902 and letter of the same date to Mrs. Murray. Peterson Letterbooks, McGill University Archives, R.G. 2.
20. Peterson Letterbooks, McGill University Archives, R.G. 2.
21. Peterson Letterbooks, McGill University Archives, R.G. 2.
22. Letters of 7 May and 12 May to Mrs. Murray from Peterson. Peterson Letterbooks, McGill University Archives, R.G. 2.
23. Letter of 20 May 1902, post script, to Lord Strathcona from Peterson. Peterson

The McGill University Collection of Greek and Roman Coins

Letterbooks, McGill University Archives, R.G. 2.

24. Peterson Letterbooks, McGill University Archives, R.G. 2. Among other differences, there were now 7 Greek gold coins, not 15, and 55 silver instead of 60; there was 1 Roman gold coin instead of 7, and 60 Imperials instead of 137; and there were 10 Russian gold coins instead of 20, and about 170 silver instead of 230. Based on these figures, Peterson acquired about 900 (923) Greek, Byzantine, Asiatic and Roman coins. See letter of 17 April 1902 to Mrs. Murray for these figures.

25. Peterson Bequest, Board of Governors' Papers, McGill University Archives, R.G. 4. It is not clear as to whom this letter was addressed, but it must have been to someone at McGill, perhaps the Secretary A.P.S. Glassco.

26. Peterson Bequest, Board of Governors' Papers, McGill University Archives, R.G. 4.

27. The Russian coins and medals are not now part of the McGill collection.

28. Peterson Bequest, Board of Governors' Papers McGill University Archives, R.G. 4.

29. *The McGill News*, vol. 12, no. 3 (June 1931), 53.

30. Cyril Fox, *A Survey of McGill University Museums*. (Montreal: McGill University, 1932), 16, 23.

31. Report [of the] Numismatic Collection, McGill University". Typescript prepared by E.L. Judah, Secretary, University Museum Committee, circa 1932, 4 pp. (From an assessment done over the previous two years by Mr. L.A. Renaud, Honorary Numismatic Consultant to the University.) Photocopy on file, Ethnology Collections, Redpath Museum, McGill University.

32. *Ibid.*, p. 1. This comment regarding small donations of very little use probably refers to coins transferred from the N.H.S.M.

33. *Ibid.*, p. 2.

34. Sullivan, iii.

35. *Ibid.*, vii.

36. [Colin Gordon]. Handwritten tally of coins, circa 1966. On file, Ethnology Collections, Redpath Museum, McGill University, Montreal. Gordon's tally shows a significant increase in the number of Roman, and especially Greek coins, compared to the 644 Roman and 253 Greek coins noted in Mrs. Murray's catalogue. Although the composition of the collection passed on to Principal Peterson by Murray and that presented to McGill by his son, W.G. Peterson is not known, comparison of these figures allows some speculation as to the collection's development by both Petersons. On the other hand, a report prepared in 1966 for the Wenner-Gren Foundation for Anthropological Research records only 800 items for the Peterson coin collection. This information was not communicated to Gordon, and does nothing to elucidate the question of the development of the McGill collection by the Peterson and/or others. Report on file, Ethnology Collections, Redpath Museum, McGill University.

37. Standard numismatic reference circa 1900.

38. Sullivan, iii-iv.

39. Judah, 2.

40. Mrs. Clark Murray, "Catalogue."

41. Correspondence to Mrs. B. Lawson from Mrs. M. Sinclair (Spink & Son Ltd.) 19 June 1990 and from Mr. Peter Mitchell (A.H. Baldwin & Sons Ltd.) 12 September 1990. On file, Ethnology Collections, Redpath Museum, McGill University.

42. It is most unlikely that this Tarentine didrachm was acquired for the N.H.S.M. Although the N.H.S.M. did not disband until 1925, its collections were packed up and essentially inactive from 1906 onwards, as it awaited funds to erect a new building, which unfortunately never materialized (see Frost, vol. 2, 41).

43. Sullivan, iv.

44. *Ibid.*, iv.

45. Correspondence to Mrs. B. Lawson from Mr. Peter Mitchell (A.H. Baldwin & Sons,

Ltd.), 3 January 1991. On file, Ethnology Collections, Redpath Museum, McGill University.

46. One apparent oversight in the transfer of classical coins from the McCord to the Redpath Museum, resulted in the unfortunate loss of 65 Roman (silver) Denarii, sold by the McCord to Spink & Son, Ltd. in 1975.

47. For the coins, see: Whitehead, Pacatian, nos. 1, 2, p. 73; Claudius II, no. 14, p. 88; Maximian I Herculeus, no. 36, p. 136; Olybrius, no. 1, p. 169; and Postumus, nos. S2, S3, S4, p. 210. For Becker, see: George F. Hill, *Becker the Counterfeiter*. Chicago: Obol, 1977. (originally published in 1924.)

48. Schlosser, vol. II, no. 306.

49. See: "Le monnayage des duovirs corinthiens," *Bulletin de correspondance hellénique*, Supplement 15 (1988) for three coins from Corinth under Roman rule.

50. Michael Attas, "The fineness of Tarentine didrachmas," in *Papers in Greek Archaeology and History in Memory of Colin D. Gordon*, edited by John M. Fossey, *McGill University Monographs in Classical Archaeology and History*, Vol. I. (Amsterdam; J.C. Gieben, 1987), 91-115. H. Marshall's work is not yet published.

51. T. Saavedra has kindly provided the information in the text on elemental analysis.

Under the Banner of the Book: the Work of Karel Teige

by Irena Žantovská Murray

Painter, designer and critical theorist, the Czech modernist Karel Teige (1900-1951) sought to address the central dilemma of Modernism: the conflict of the functional with the fantastic, the mundane with the magical. Associated with the influential avant-garde group Devětsil, Teige found the book to be an ideal medium for his artistic vision, combining innovative designs and avant-garde ideas to forge an instrument of mass appeal. The present article analyzes the underlying principles of Teige's philosophy of design and illustrates the evolution of his art with reference to his own writings and a variety of examples.

This article is based on a lecture given at the Getty Center for the History of Art and the Humanities in April 1990, and repeated in the McGill University Library Lecture Series, in October 1990.

Peintre, designer et théoricien critique, le moderniste tchèque Karel Teige (1900-1951) a cherché à percer le dilemme du modernisme: le conflit du fonctionnel et du fantastique, du banal et du magique. Proche du groupe avant-gardiste Devětsil, Teige a découvert dans le livre le moyen idéal de donner libre cours à sa vision artistique, et combiner des conceptions novatrices et des idées avant-gardistes pour forger un instrument ayant un grand rayonnement. Cet article analyse les principes sous-jacents de la philosophie de la conception de Teige et illustre l'évolution de son art en faisant référence à ses propres écrits et à de multiples exemples.

Cet article est tiré d'une conférence prononcée au Getty Centre for the History of Art and the Humanities en avril 1990, puis en octobre 1990 dans le cadre du cycle de conférences des bibliothèques de l'Université McGill.

J'inventai la couleur des voyelles!-A noir, E blanc, I rouge, O
bleu, U vert. -Je réglai la forme et le mouvement de chaque
consonne, et avec des rythmes instinctifs, je me flattai
d'inventer un verbe poétique accessible, un jour ou l'autre, à tous
les sens.

Rimbaud, *Alchimie du verbe*

In April 1990, when the Czech communist daily *Rudé Právo* published a full-page article about him, many Czechs encountered the name of Karel Teige (Figure 1) for the first time. And yet, Teige (1900-1951) should have been very hard for the culture-loving Czechs to ignore. Leader of the Devětsil group so prominent in Czech artistic and intellectual life in the Twenties, a groundbreaker in such areas as typography, design and the theory of modern art and archi-

itecture, Teige influenced the course of Czech modernism between the two World Wars; he also made a contribution to the internationalization of the avant-garde. His personal exchange of ideas and his correspondence with Filippo Marinetti, Enrico Prampolini, Ilya Ehrenburg, El Lissitzky, Le Corbusier, Amédée Ozenfant, Jean Badovici, Theo van Doesburg, Mart Stam, Hannes Meyer, Laszlo Moholy Nagy, Georges Ribemont-Dessaignes, André Breton, Paul Eluard and Frederick

Kiesler, among others, helped put the Czech circle of left-wing avant-garde artists at the very center of the most interesting developments in European inter-war cultural history.¹ It is not the purpose of this article to focus on these international connections, but rather to attempt to describe Teige's work in light of one of the central themes of the modernist project, the conflict between the functional and the fantastic; and particularly, the way this conflict was dealt with by those of the modernists who found themselves politically on the Left.

Karel Teige was nineteen years old when he made the following comment in his diary, doubtless unaware that for the rest of his short and prolific life he would attempt to address its challenge:

I cannot really articulate that dichotomy which is part of the eternal conflict between tradition, law and the limits of the *métier* on one hand, and fantasy, invention and the unbridled will to revolution on the other. This "longue querelle de la tradition et de l'invention, de l'Ordre et de l'Aventure" is what I cannot solve...²

In the course of the next three decades, he would explore this gap stated so eloquently by Apollinaire, through his writing, his design and his search for social modernity, only to see his "march into tomorrow" turn into a dance of death and decay. He died of heart failure on October 1, 1951, amidst the wave of arrests of left-wing intellectuals, many of whom were his friends.

Painter, designer, author, translator and critic, and the leading theorist of the Czech avant-garde between the two World Wars, Teige espoused the left-wing ideals of the new socialist utopia with the zeal of a revolutionary and the skill of a poet. Taking for his own Zola's device of "d'être de son temps", he helped define and organize the program of post-war Czech modernism around the common desire to "push open the windows on the world", a desire concomitant with the goals of the newly born republic. This program, he felt, was centered around the polarity of two

crucial aspects of *Weltanschauung*, two elements of *Weltordnung*: poetry and construction. It was Teige who was largely responsible for putting this dualism at the centre of the Czech modernist project. As the Czech critic F. X. Šalda (1867-1937) put it,

With a radical stroke, Teige divided the world into two spheres. One was the sphere of reason, of construction, of work, of everyday life. The other was that of the irrational, of play, of the holiday spirit. To poetry, he assigned quite openly the task of play and by doing so, offended a great number of ponderous little citizens in this forever self-important nation, where every other man studies his lines in the mirror to make sure they have the right air of philosophy and sophistication. And yet, he didn't say anything else than what had been already said by that pathetic moralist Schiller when he wrote: "Ernst ist das Leben, heiter ist die Kunst."³

Teige's contribution to modernism can be examined through the two distinct phases in which he and his collaborators attempted to articulate the complex relationship inherent in the polarity of "Poetism" and Constructivism.⁴ The first phase coincided with the establishment and development of the Union of Modern Culture, *Devětsil*, of which Teige was the principal theorist, and lasts from 1923 through the early thirties. This was followed by a second period in which Teige and most of the members of his group adopt the principles of Surrealism.

In the first period, Teige sought to transcend the tension he had himself generated by fusing the theoretical and the practical through the development of a novel approach to book design. In the second, deteriorating economic and political conditions undermined Teige's faith that the tension might be resolved through a unified aesthetic practice. Rather, he found himself increasingly operating in two distinct modes—a public theoretical discourse and a separate, more private artistic practice focusing upon surrealist collages.



Figure 1. Josef Šíma, *Portrait of Karel Teige*, 1923. (Photograph courtesy of the Museum of National Literature, Prague, accession 16523.)

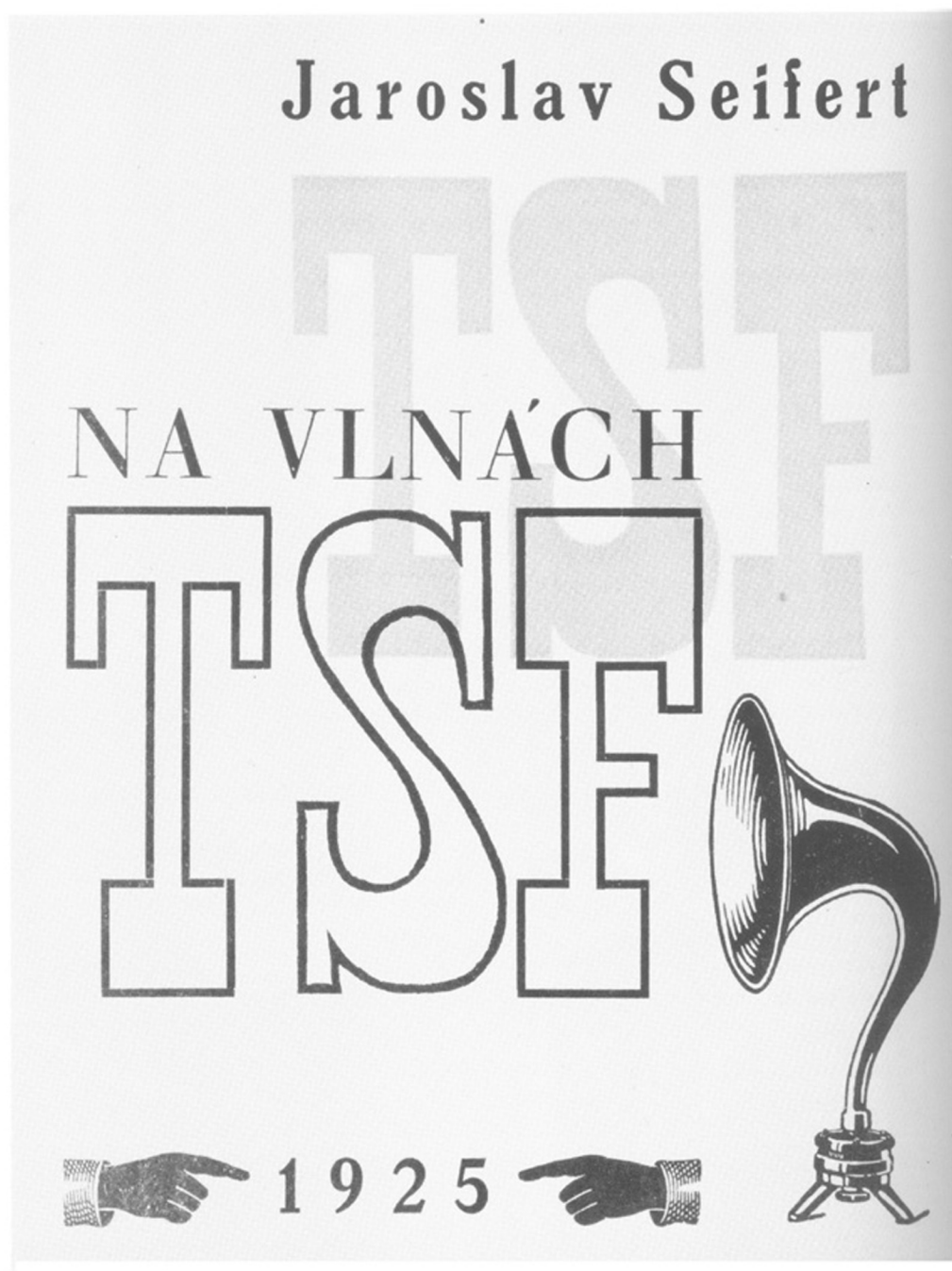


Figure 2. Cover of Jaroslav Seifert, *Na Vlnách* [On the waves of T.S.F.], Prague, 1925.
(Collection of the author.)

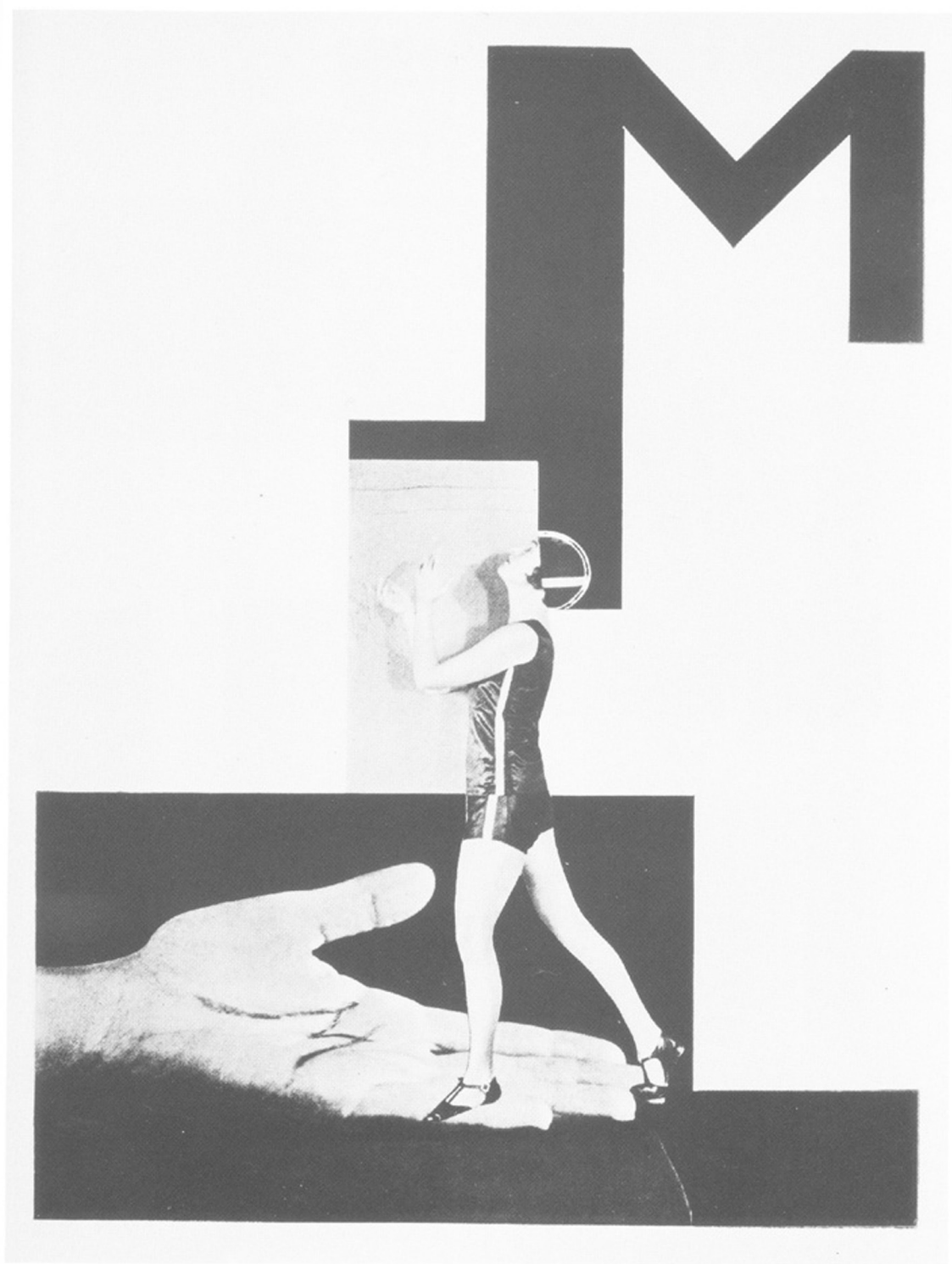


Figure 3. The letter "M" from Vítězslav Nezval, *ABC*, Prague, 1926. (Department of Rare Books and Special Collections, McGill University Libraries.)

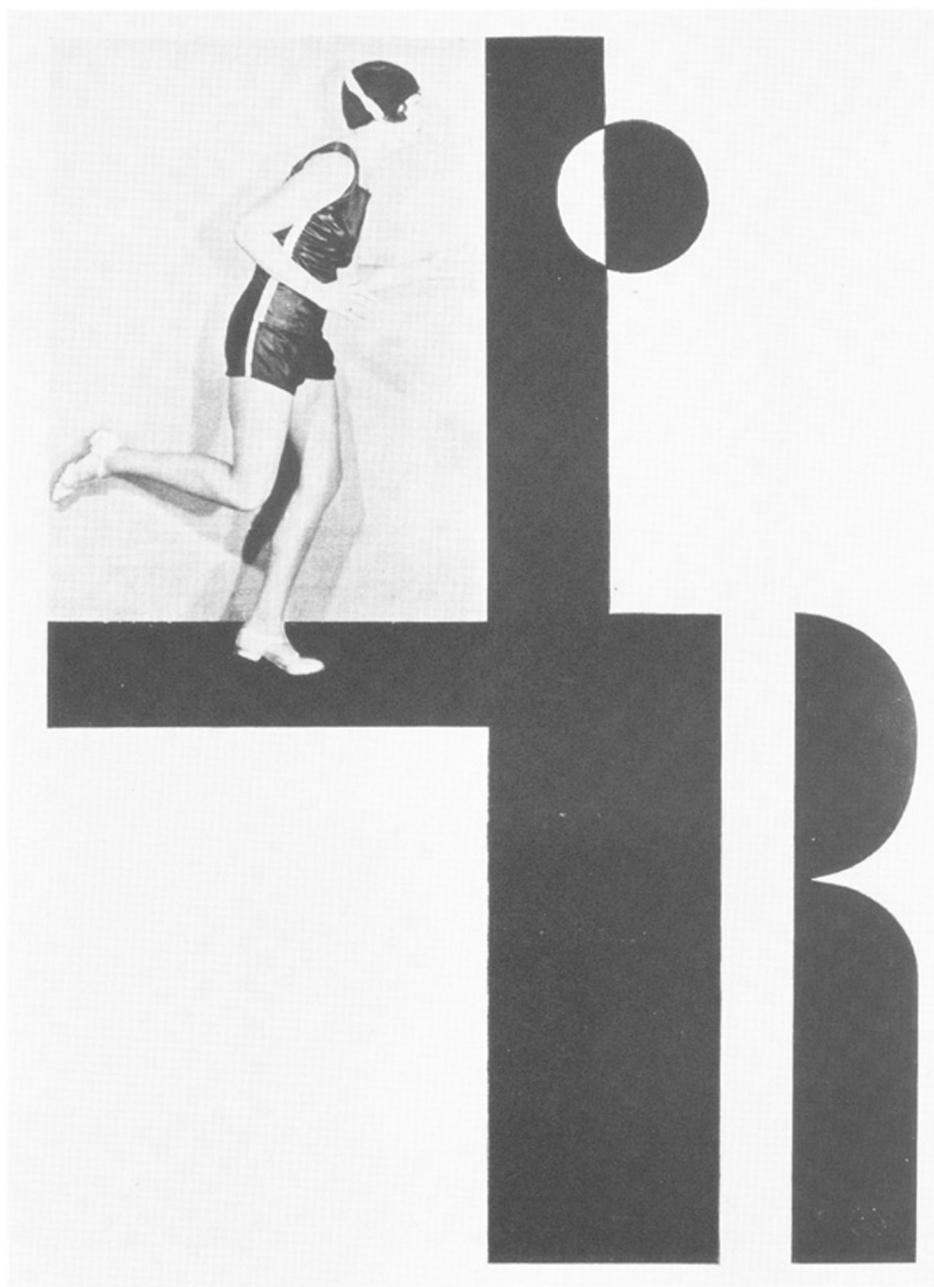


Figure 4. The letter “R” from Vítězslav Nezval, *ABC*, Prague, 1926. (Department of Rare Books and Special Collections, McGill University Libraries.)



Figure 5. Cover for Karel Teige, *Stavba a básně* [Construction and Poetry], Prague, 1927. (Collection of the author.)

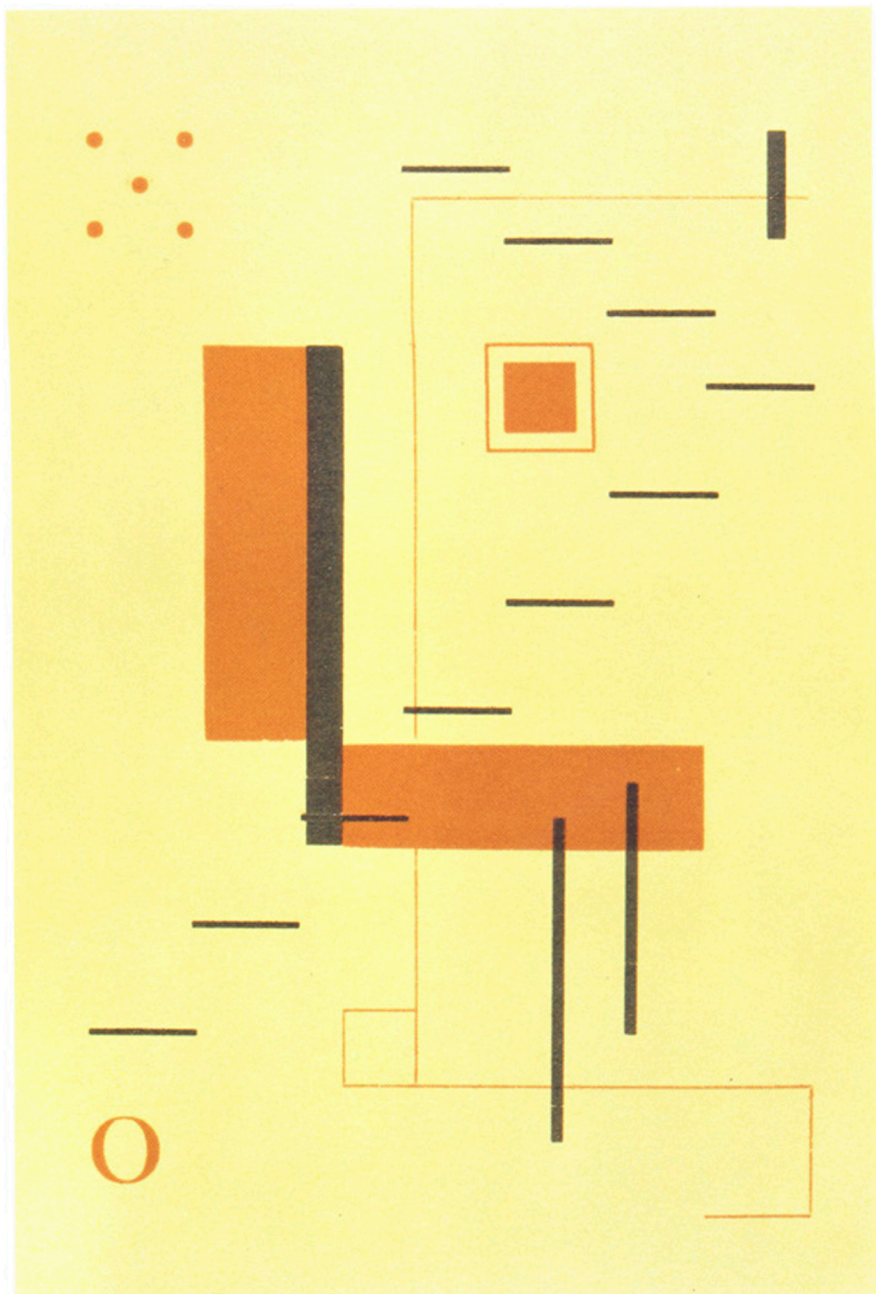
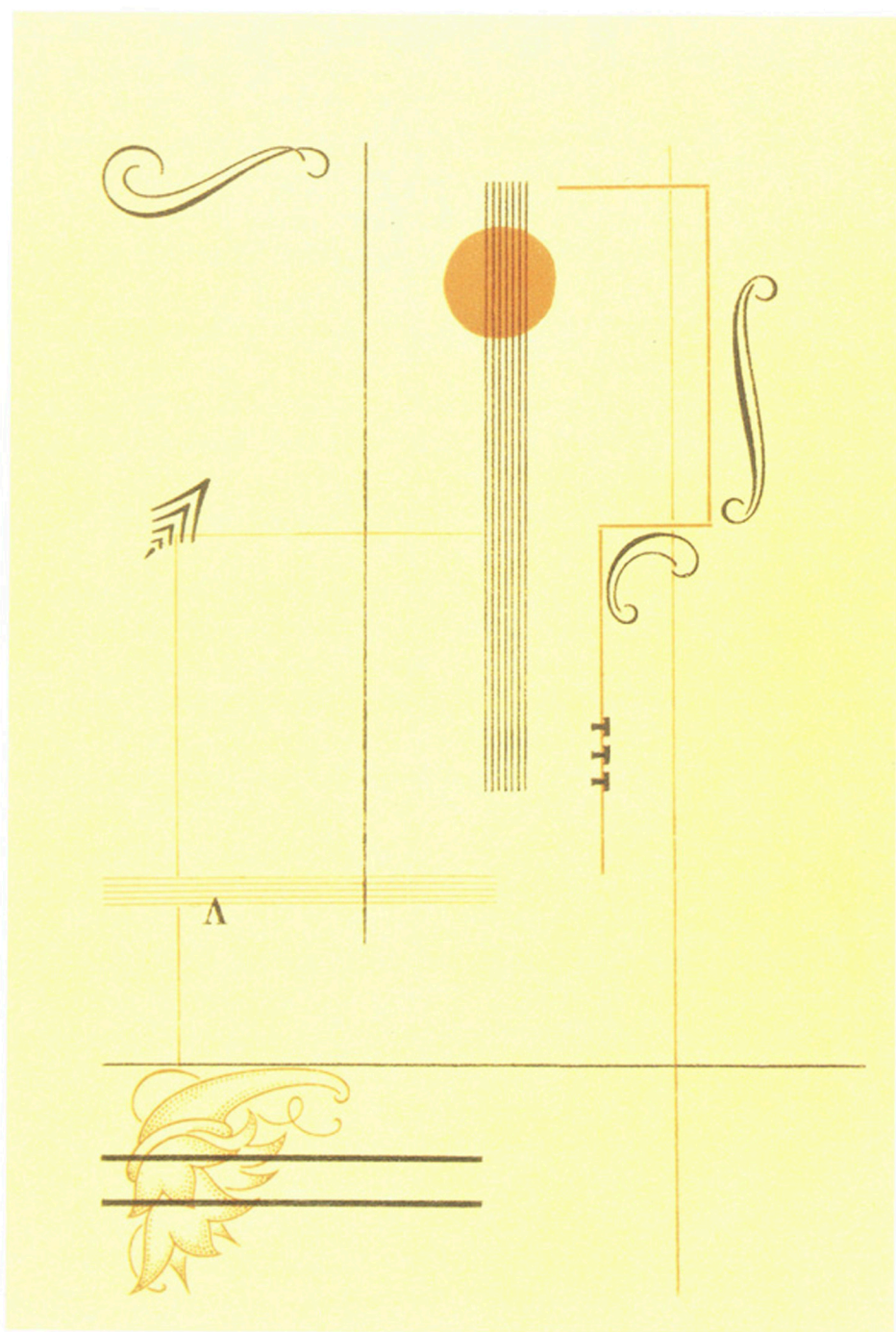


Figure 6. Illustration for Konstantin Beibl, *Zlom* [Rupture], Prague, 1928. (Collection of the author.)



**Figure 7. Illustration for Konstantin Beibl, *Zlom* [Rupture], Prague, 1928.
(Collection of the author.)**



Figure 8. Collage "Baudelaire's Shore." (Photograph courtesy of the Museum of National Literature, Prague, accession 31830.)

The first stage of Teige's development is dominated by his role as "spiritus rector" of Devětsil, a left-wing avant-garde group of artists, poets, dramatists, critics, film makers, composers and publishers.⁵ One of the earliest manifestations of this group was an innovative form of visual poetry inspired by the fusion of painting and poetry adumbrated by Cubism, and called "image-poems."

... We have tried to compose the tourist poem, a reflection of travel lyrics, combining it from several significant elements: an ocean liner's flag, binoculars and a letter with the words "Wish you were here!" These clues should be sufficient to represent reality in a way that is inaccessible to words. Or we got ready to shoot *The Departure for Cythera*, a short lyrical film including a departing yacht, a fluttering scarf to bid farewell, and a neon sign "Au revoir. Bon vent!"⁶

As Teige emphasized elsewhere, these small graphic works relied on the juxtaposition of simple, often banal elements "which rational logic maintains in a mutual estrangement", but in which their unexpected proximity "creates an electric lyrical tension".

Teige, who originally wanted to be a painter, rapidly shifted his interests to this new collaborative art form. It is questionable whether he abandoned the drawings, watercolours and oils of his early years because of a desire for a larger vision of life as *poiesis* or because he felt his was an insufficient talent for becoming a serious painter. The linocuts which he published in the local modernist reviews such as *Červen*, *Kmen*, *Veraikon* and in the early avant-garde vehicles that he himself had helped establish, the collections *Devětsil* and *Life II*, were perhaps an attempt to bridge the individual manifestations of what he had as a sixteen year old referred to in his diary as "artistic reclusiveness" to more popular efforts of expression.

For Teige, after an initial period of experimentation with visual poetry, the book and book design quickly became the vehicle of preference, the vehicle that lent itself ideally

to his desire to reconcile the clarity and precision of construction with the principles of poetic making in the very body of his own work. The ramifications of mass distribution, the opportunity of giving shape to a new conception of the medium and the possibilities inherent in collaboration with different artists, writers and publishers were additional incentives. In the twelve short years of Devětsil's existence, years marked by ideological and artistic tensions among the group's members, Karel Teige wrote, translated, designed and collaborated on more than one hundred and fifty titles, one sixth of the total output of nine hundred titles with which Devětsil members were associated.

In addition to the major role he played in the editorship and design of the two Devětsil collections of 1922 mentioned earlier, Teige's early publications included a catalogue pamphlet on the Russian-born sculptor Alexander Archipenko (1887-1964), published on the occasion of an early exhibition in Prague, organized by Devětsil in April 1923. Quoting from a letter sent him by the artist on the occasion of the exhibition's opening, Teige identified with Archipenko's statement that he saw himself "neither as a revolutionary, nor a conservative artist," but rather as one who seeks "the NEW in an effort to solve plastic problems which are inspired by [our] time and governed by [our] feeling."⁷ In the same period, his early interest in architecture led him to take over the editorship of *Stavba* [Construction], which quickly became a platform of international constructivist exchange.⁸

Teige's assault on the image of the mass market book which, unlike the ornate bibliophile editions of yesteryear seemed to have been deprived of any rights to a true visual presence, began with several attempts to "visualize" the poetry of two of his closest Devětsil friends, Vítězslav Nezval (1900-1958) and Jaroslav Seifert (1901-1984). "The new language of poetry," he declared at the time, "is heraldry: the language of signs."⁹ Teige's designs for Nezval's *Pantomime* (1924) and *ABC* (1926) and Seifert's *On the Waves of T.S.F.* [T.S.F. = Telegraphie sans fil] (1925) were as radical attacks on the tradition of

Czech typography as were the first Cubist canvases on the tradition of naturalist painting.¹⁰

To find an adequate range of type faces for *Pantomime*, a collection of poems, plays and music audaciously illustrated by an eclectic mixture of reproductions, publicity stills, and original work of Nezval's friend Jindřich Štyrský (who also designed the photomontage cover in the style of an "image-poem"), Teige literally rummaged in the type-cases of the prominent bourgeois weekly *Národní Politika*, emerging to shower friends with examples of his finds. The unique typography of individual poems in Seifert's collection *On the waves of T.S.F.*, which Teige designed in its entirety, represents the first truly consistent embodiment of Teige's synthetic treatment of the book as of his conception of modern typography (Figure 2). For the *ABC*, a collection of Nezval's poems originally published in *Pantomime*, Teige reinterpreted the cycle through a combination of typography and photomontage. The success of his efforts is best explained in his own words:

Typography and photomontage can become art only in those rare and exceptional circumstances when a graphic artist and a poet meet in an eclectic kinship of spirit, when the two create a book together as a coherent work of poetic making, so that the graphic realization of such a book becomes an optical poem ... Qualitative transformation takes place only when the contents will be not a mere photo-illustrated text, but will be transformed into a coherent, organic and simultaneous phototext. Then the type will be not merely accompanied by images, but the whole book will be written simultaneously by word and image. Only then the image will be not something added, but will become an invisible part of the expression of the author's idea.¹¹

Among the most enduring images of Teige's typographical creations is his design for Nezval's poetry as danced on the stage of the Liberated Theatre, Devětsil's dramatic

platform, by Milča Mayerová, a pupil of Rudolf Laban.¹² (Cover and Figures 3, 4.)

Among Teige's multiple interests in this period was his preoccupation with the medium of film and the possibilities of motion pictures as a new form of popular culture. (Of anecdotal interest is perhaps the fact that the only honorary foreign members of Devětsil were three great names of the American cinema: Charles Chaplin, Mary Pickford and Douglas Fairbanks.) Teige's early manifestos, such as "Photo-Cinema-Film" from *Life II: Collection of the new beauty*, and other articles and essays written in the early years of Devětsil's existence, were published as a collection under the laconic title, *Film*.¹³ In a postscript to the book, which he also designed, Teige explains that it was the vitality, intensity and unconventionality of the medium, as well as its popular appeal, that made cinema an ideal vehicle of the new era of art. "I want to show that Chaplin's and others' silent movies are the only truly popular art today. These serially produced mechanical film plays I consider to be the authentic art of modern times..."¹⁴

True to his ideal of poetic making, Teige, in collaboration with poet Jaroslav Seifert, also attempted to create modern filmscripts: for this, he drew on a variety of Devětsil publications, such as *Disc*, *The Zone* and others.¹⁵ Teige's interest in film in general, and in Chaplin in particular, is also evident in his book designs for such works as Louis Delluc's *Drames du cinema* and Chaplin's *My trip abroad*; the Czech translation of the latter was introduced by Teige's essay on the man he called "the poet of laughter". The influence of film was evident also on the cover of *The World Which Is Laughing*, Teige's own collection of essays.¹⁶

In addition to writing about film and concurrent with his many other preoccupations in this period, Teige actively pursued a policy of introducing the work of foreign authors as part of the Devětsil program. His own translations of two works of French Dada author Georges Ribemont-Dessaignes, *Oui et non ou la cage dans l'oiseau* and *L'autruche aux yeux clos*, are attempts to introduce a little known author, whom he admired, to the Czech pub-

lic. Teige had been introduced to Ribemont Dessaignes by painter Josef Šíma who designed the cover of the original French edition of *L'austruche* as well as those of the two Czech translations. *Oui et non ou la cage dans l'oiseau* had been translated directly from the author's manuscript. The manuscript itself subsequently disappeared, much to the distress of Ribemont Dessaignes scholars for whom the only extant text, in Czech, remains, understandably, inaccessible. Teige returned to translation twice more during his Devětsil years: in 1929, when, in collaboration with Philippe Soupault, he selected and later translated (together with Jindřich Hořejší, 1886-1941), as well as designed, the Czech edition of Lautreamont's *Les Chants de Maldoror* and again in 1930, when he collaborated on a translation of Stendhal's *De l'amour*, which he also designed.¹⁷

Equally rooted in his belief in the necessity of the international orientation of avant-garde art are his designs for dozens of translations of authors many of whom he knew and corresponded with, such as Philippe Soupault or Isaac Babel, and most particularly Ilya Ehrenburg.¹⁸ He also created designs for the works of writers, living and dead, whom he admired and drew inspiration from, especially Baudelaire and Apollinaire, but also Balzac, Flaubert, Verlaine, Cocteau, Emile Verhaeren, Blaise Cendrars, Jules Romains, Jules Supervielle, and Joseph Delteil, among many others.¹⁹ Above all, his integral design for the fourteen successive parts of Marcel Proust's *À la recherche du temps perdu*, published between 1927 and 1931 by Odeon, the house most committed to Devětsil ideals, remains among the most outstanding examples of his work.²⁰ The consistency of approach and the subtle variations within the series attest to Teige's thoughtful and innovative methods.

The theoretical issues underlying Teige's approach to book design were adumbrated in his manifesto on modern typography written in 1927.²¹ With considerable design experience already to his credit, Teige methodically analyzed his own approach to the book designer's task and addressed the different components of the book in turn.

I view the cover as a poster of the book... That's why it is essential that it have a maximum impact. To do so, it must be composed in a dynamic equilibrium of both colours and forms. To emphasize this equilibrium, I usually choose primary colours and primary geometrical forms. I feel it is the orthogonal forms, the square and the oblong, that best correspond to the orthogonal plane. The circle too imposes itself as the form most agreeable to the eye. ... The title page requires similar considerations as the cover. It too is a banner of the book. Its visual construction, compositional lay-out and the choice of types and colours should be a pictorial, optical transcript of the literary content of the book. The colophon, most important bibliographically, should be a detailed cadastre of the book: it requires the clarity of a ledger."²²

In his essay, following El Lissitzky's famous eight-point manifesto, Teige also summarized his six points for the new, constructivist typography. His anti-decorative, anti-academic stance, his emphasis on simplicity and legibility of design and its harmonious, synoptical articulation, his insistence on a full understanding of the author's purpose as the *sine qua non* of design as well as on the exploitation of the full range of technological possibilities, and finally his call for a close collaboration with the printer, which Teige compared to the relationship between an architect-designer and a construction engineer, were the first comprehensive formulation, in Czechoslovakia, of an entire publishing program, exemplified by houses such as Odeon or Aventinum, and publishing series such as Symposium, the Pleiades, and others (Figure 5).

Nowhere is Teige's conception of constructivist typography more consistently evident than in the thirty issues of *ReD* (*Revue Devětsilu*), the last of the Devětsil periodical publications, which appeared between 1927 and 1931.²³ Subtitled *Revue internationale de*

l'activité contemporaine, it extended the ideals of *L'Esprit Nouveau* in its determination to become a synthetic platform for international avant-garde activity. Having supreme editorial and design control, utterly free of any constraints from publisher Jan Fromek (1901-1966), Teige could produce total consistency both in the matter of content and in typography. Individual issues held true to his originally stated ambitions: "our content will simply be the life of contemporary creativity, the birth of new forms, the victory of inventions, and the creative tension of experiments".²⁴ Thematic issues became a trademark of the review, beginning with v. 1, no. 2 (10 years of Soviet culture), no. 5 (International Architecture) no. 7, devoted to Devětsil's Liberated Theatre, and no. 9 (Manifestos of Poetism); in volume 2, numbers 2 (Apollinaire), 6 (Marinetti and Futurism), 8 (Photo-film) and 9 (International Architecture again); finally, in volume 3, published between 1929 and 1931, no. 5 devoted to Bauhaus, a double no. 6/7, featuring the text of the course Teige taught at the Bauhaus in the Fall of 1929, entitled *Sociology of Architecture*, no. 8 (*Le grand Jeu*), and a final number once again devoted to International Architecture.

In this period, Teige's book design reached its apogee in the two collections of poetry by Konstantin Biebl (1898-1951), *With the ship that brings tea and coffee and Rupture*.²⁵ In the latter, Teige's typographical compositions in black and red on a luminous yellow background embody his concept of 'modern illumination', transcending the conventional blandness of black and grey (Figures 6, 7).

Teige's last designs of the Devětsil years include Biebl's *Heaven, Hell and Paradise*, Nezval's *She wanted to rob Lord Blamington*, Stendhal's *De l'amour* (in Teige's own translation), and Teige's own collection of essays on modern poetry, *The World Full of Smells* published as a second volume of a larger cycle, *Of Humour, Clowns and Dadaists*.²⁶ In this period also belong his critical overview of Czech architecture in the 20th century, *Modern Architecture in Czechoslovakia*; a separate publication of the Bauhaus lectures, *Sociology of Architecture*; and the three volumes

of the MSA series [= *Mezinárodní Soudobá Architektura*, International Contemporary Architecture]. In the last year of Devětsil's existence, Teige published his book *Minimum Dwelling* (1932), a work of close to 400 pages which at the time of its appearance constituted the "biggest monograph on the problem of housing in the international professional literature."²⁷

In the optimistic climate of the 1920s, Teige's solution to the modernist puzzle was a hopeful one; it could be interpreted as poised on an integration of theory and practice in the making of books which were both beautiful and functional. But the 1930s brought a decisive shift both in the political climate and in the work of Teige and his circle. Teige's interests increasingly seemed to have separated into a public and a private realm, as if the poetic and the constructive could no longer co-exist in quite the same way. Most of his public activity at the time came to be centered around his work promoting functionalist architecture. After *Minimum Dwelling*, he published a monograph on the work of a fellow Devětsil member, architect Jaromír Krejcar (1895-1949), (whose wife, Milena Jesenská, had been the addressee of Franz Kafka's *Letters to Milena*).²⁸ This work was followed by other publications on the sociology of architecture and housing: *Garden Cities of the Unemployed* (1933) and *Architecture of the Left and the Right Wing* (1934), both sponsored by the Left Front, the more politicized faction of the former Devětsil members.²⁹ In 1936, he published *Art Fair*, an attempt to formulate his viewpoints on the sociology of art.³⁰ *Vladimír Majakovskii* (1936), Teige's incisive study into the history and theory of Russian Futurism, also appeared in that year.

Teige's work as book designer is limited in this period to a series of cover montages for the work of his friend, Vítězslav Nezval. They present an interesting contrast not only to his early interpretations of *Pantomime* and *ABC*, but also to the 1926 title page designs for Nezval's books *A Lesser Rose Garden* and *The Carnival* (the second with Otakar Mrkvička, 1898-1957). The classical cover of the 1928 bibliophile edition of Nezval's *Jewish Cemetery*, illustrated with six original litho-

graphs by Jindřich Štyrský, stands apart from the rest of Teige's graphic work and in a way forms a stylistic transition in his approach to Nezval's oeuvre. Teige's covers for Nezval's *Poems of the Night* (1930), *The Glass Cloak* (1932) and *Return Ticket* (1933) already reveal Teige's surrealist orientation. *Farewell and a Handkerchief* (1934), *The Invisible Moscow* (1935) and *Woman in the Plural* (1936) are but a few further examples of this process.

Beginning in 1935, the more private dimension of Teige's activity begins to emerge. As his most devoted pupil and interpreter Vratislav Effenberger pointed out, from that point onward until his death, "surrealist collages became a pictorial diary of Teige's thinking". Of the more than three thousand works of this private realm, some are byproducts of Teige's book cover montages of the 1930s, such as Verlaine's *Les poètes maudits* or Nezval's *Prague with the Fingers of Rain* (1936); others are studies and improvisations on the work of other artists, such as Max Ernst, Giorgio di Chirico or René Magritte. Still others are inspired by, or reinterpret, the poems of his heroes of modernism, Baudelaire's "Invitation au voyage," (Figure 8) or Mallarmé. Many are inspired by his ongoing philosophical reflections, or are products of his growing anxieties as well as of his poetic visions and dreams, including the endless exploration of female body, that "Venus born of the pavement".

Although he considered his collages part of the private realm, Teige acknowledged their value as works of art; in his manuscript on the collages of Jindřich Štyrský, he wrote:

The transition from concrete to real, from realized fantasy to fantastic reality, from real groupings of utopian objects to the fantastic constellations of real objects, elected by desire to express the hidden tension, this transition was facilitated by hyperbolic collages whose important evolutionary function cannot be considered a minor experiment. Here, as many times before, a fundamental evolutionary act first takes place not in the works created by traditional techniques,

but in a space free of the trickery of the painterly script.

From 1934 on, after their initial ambivalence about the surrealist movement, members of the original Devětsil circle finally established the Prague Surrealist Group. Teige's distinctive qualities of leadership, international orientation and ability to combine the practical and the theoretical became engaged in the service of the surrealist revolution. In 1934-35, Teige edited the collection *Surrealism in Discussion*, based on the discussion evenings organized by the Left Front.³² In the spring of 1935, he welcomed André Breton to Prague where the latter, together with Paul Eluard and the members of the Prague Surrealist Group, gave a series of lectures, the core of which led to Breton's *Qu'est ce que le surrealisme*, published in Czech in 1937.³³ Teige fostered contacts between the Czech surrealists and members of the Prague Linguistic Circle, particularly Jan Mukařovský and Roman Jakobson, some of whose books he had designed. In 1938, following the ideological rift within the Prague Surrealist Group which led to Nezval's departure, Teige published a pamphlet entitled *Surrealism against the Current* in which he summarized the principles of the work of the Group and defended them against the attacks of Nezval's clique.³⁴ This slim, cheaply printed booklet was his last pre-war publication.

In an earlier period Teige had believed that it was possible to achieve a synthesis of Poetism and Constructivism in the collective practice of a group of politically engaged and aesthetically informed intellectuals; in the 1930s he apparently could no longer sustain this belief. Instead of a coherent artistic practice, focused on the writing and production of books, we find in this period an increasingly fragmented praxis—on one hand, his socially oriented theoretical writings and on the other, a hermetic creation of esoteric and self-referential collages.

In the post-war years, Teige's voice came to be heard in increasing isolation by a close circle of surrealist friends. In a fragment from his post-war writing he expresses a wish "to sleep with my eyes closed where the world cannot come, to sleep over and over under the

destroyed sky on the soft seaweed of spring rushes.”³⁵ After his death, in 1951, his legacy was suppressed for almost a decade, until Nezval’s memoirs at least broke the oppressive silence; a second generation of Prague surrealists led by Effenberger could, in the mid-1960s, at last take steps to publish some of Teige’s writings from the 1920s and 1930s, together with an extensive commentary.³⁶ The appearance of the third projected volume, of Teige’s writings from the 1940s, was halted by the Soviet invasion of 1968.

More than twenty years later it has now once again become possible for both Czech and foreign scholars interested in the Czech avant-garde to re-discover the full extent of Teige’s contribution.

In his myriad interests, in the depth of his scholarship, in his sometimes inflexible ideologies and above all in his design, he remained, to the end, a poet in the original Greek sense of the word *poiesis*, in the sense in which his friend Vítězslav Nezval described him in his 1938 book, *Passant de Prague*:³⁷

Poet is he who destroys and rebuilds the myths, who destroys them to shape them into others, always more real.

Notes

1. Following Teige’s death, his entire personal archive, together with his extensive library, was confiscated by the then Ministry of State Security. While originally slated for destruction, part of Teige’s literary estate, consisting of 72 boxes of manuscripts and selected correspondence, survived and was eventually deposited with the archive of the Museum of National Literature in Prague. The above information is based on a brief inventory of the surviving archive: Růžena Hamanová, comp., *Karel Teige (1900-1951)*. Literary estate 736 (Praha: Literární archiv PNP, 1968).
2. Diary, 20 August 1919. Cited in *Karel Teige. Od poetismu k surrealismu* [Karel Teige: from Poetism to Surrealism]. Exhibition catalogue. (Brno: Dům umění města Brna, 1967), unpag.
3. F. X. Šalda, “O poetismu” [Poetism], in *Nejmladší poezie česká* [The Youngest Czech poetry] (Praha: Otto Gíral, 1928), 100.
4. Teige’s early conception of Poetism was published in *Host* [Guest], 9-10 (July 1924) 197-294, and later reprinted in his book *Stavba a báseň* [Construction and Poetry] (Praha: Vaněk a Votava, 1927), 159-166. In it, Teige expressed the nature of Poetism as a *modus vivendi* in which art, literature and philosophy are fully integrated with everyday life, are everyday life. Later theoretical modifications, as well as numerous examples of Poetism in art and literature of the period, were gathered in a collection by Květoslav Chvatík and Zdeněk Pešat, comps., *Poetismus* (Praha: Odeon, 1967). Numerous references to Poetism can be found in a recent exhibition catalogue, *Czech Modernism* (Houston: Museum of Fine Arts, 1989).
5. In 1986, the first post-World War II exhibition representing the activities of Devětsil was organized in Prague and Brno under the title *Devětsil: Česká výtvarná avantgarda dvacátých let* [Czech avant-garde of the twenties]. A modified Devětsil exhibition was shown in Oxford in the Spring of 1990 under the title *Devětsil: Czech Avant-garde Art, Architecture*

and Design. Both exhibitions were accompanied by catalogues. The origin of the name Devětsil remains ambiguous and is alternately argued to have been derived from "devětsil," a Czech name for "butterburr," or from a compound of two Czech words, "devět" (nine) and "sily" (forces).

6. Karel Teige, "Obrazy" [Images], *Veraikon*, 10 (3-5), (1924), 38-39.

7. Karel Teige, *Archipenko* (Praha: Devětsil, 1923), 3.

8. *Stavba: měsíčník pro stavební umění* [Construction: art of the building monthly], published by the Architects' Club in Prague, 1922-1938, 14 vols. Teige joined the editorial board beginning with volume 2, 1923. He was editor-in-chief in 1926-27.

9. Karel Teige, "Poetismus", *Host*, 3(9-10), 1924.

10. Vítězslav Nezval, *Pantomima. Poesie*. Praha Ústřední studentské knihkupectví a nakladatelství, 1924; *Abeceda*. Praha: J. Otto, 1926; Jaroslav Seifert, *Na vlnách TSF. Poesie*. Praha: V. Petr, 1925.

11. Karel Teige, "Fototypografie", *Typografie* (Prague), 40 (11933).

12. Milča Mayerová, born 1901, Czech dancer and dance educator, had been photographed by photographer Karel Paspá. It is on Paspá's images that Teige's montages were based.

13. Karel Teige, "Foto-Kino-Film", *Život*, 2 (1922) 153-168; Karel Teige, *Film* (Praha: V. Petr, 1925).

14. *Ibid*

15. *Disk: revue internacionální kultury* [review of international culture], an avant-garde quarterly, published in Prague and Brno between 1923 and 1925, under the aegis of Devětsil. *Pásmo* [La zone], published by Devětsil in Brno, in 2 volumes: 1924-25, and 1925-26.

16. Louis Delluc, *Filmová dramata*, tr. J. Fastrová (Praha: Ot. Štroch-Marien, 1925); Charlie Chaplin, *Hurá do Evropy*, tr. L. Vymetal (Praha: A. Synek, 1929); Karel Teige, *Svět, který se směje* (Praha: Odeon, 1928).

17. Comte de Lautréamont, *Maldoror*, ed. Philippe Soupault and Karel Teige, tr. Jindřich Hořejší and Karel Teige (Praha: Odeon, 1929); Stendhal, *O lásce* (Praha: Škeřek, 1930).

18. Philippe Soupault, *Bratři Durandea* [Frères Durandea] (Praha: Odeon, 1926); Isaac Babel, *Rudá jízda* [Konarmii] (Praha: Odeon, 1928); Ilya Ehrenburg, *Dýmky* [Pipes] (Praha: Aventinum, 1924); *Trust De* [Trust for the Destruction of Europe] (Aventinum, 1924); *Láska Jeanny Neuillové* [Love of Jeanne Ney] (Komunistické nakladatelství, 1925); *Neobyčejná dobrodružství Julia Jurenita* [The extraordinary adventures of Julio Jurenito] (Aventinum, 1926); *Historie jednoho léta* [Story of one summer] (Odeon, 1927); *Nesnáze Kavárenského povaleče* [Difficulties of a café bum] (Odeon, 1927); *V průběžné uličce* [The canal street] (Odeon, 1928). Several of the Ehrenburg designs were done in collaboration with Czech painter and designer, Otakar Mrkvička.

19. Charles Baudelaire, *Fanfarlo* [La fanfarlo] (Praha: Odeon, 1927); Guillaume Apollinaire, *Sedící žena* [La femme assise] (Praha: Odeon, 1925); *Zavražděný básník* [Le poète assassiné] (Praha: Aventinum, 1925); *Prsy Tiresiovny* [Les mamelles de Tiresias] (Praha: Odeon, 1926); Honoré de Balzac, *Chagrinová kůže* [La peau de chagrin] (Praha: Aventinum, 1925); Gustave Flaubert, *Paměti bláznovy* [Mémoires d'un fou] (Praha: Aventinum, 1924); Jean Cocteau, *Kobout a Venuse* [Le coq et Venus] (Praha: Odeon, 1927); Emile Verhaeren, *Svitání* [Les aubes] 2nd. (Praha: Odeon, 1925); Blaise Cendrars, *Zlato* [L'or] (Praha: Odeon, 1926); Jules Romains, *Obrozené městečko* [Le bourg régénéré] (Praha: Odeon, 1928); *Psyché* (Praha: Škeřek, 1931); Jules Supervielle, *Muž divokých krajů* [L'homme de la pampa] (Praha: Odeon, 1927); Joseph Delteil, *Cholera* [Choléra] (Praha: Odeon, 1926).

20. Marcel Proust, *Hledání ztraceného času* [À la recherche du temps perdu] (Praha: Odeon, 1927-32).

21. Karel Teige, "Moderní typografie", *Typografia*, 34 (7-9), (1927), 189-198.

22. *Ibid.*, 90.

23. *ReD (Revue Devětsilu)*, 1-3 (Praha: U.S. Devětsil 1927-1931).
24. *ReD*, 1 (October 1927), 1.
25. Konstantin Biebl, *S lodí jež dováží čaj a kávu* (Praha: Odeon, 1928) and *Zlom* (Praha: Odeon, 1928).
26. Konstantin Biebl, *Nebe, peklo, ráj* (Praha: Jánská, 1930); Vítězslav Nezval, *Chtěla okrást Lorda Blamingtona* (Praha: Odeon, 1930); Stendhal, *O lásce* [De l'amour] (Praha: Škeřík, 1930); Karel Teige, *Svět který voní* (Praha: Odeon, 1930-31).
27. Karel Teige, *Moderní architektura v Československu* (Praha: Odeon, 1930); M.S.A. (Mezinárodní soudobá architektura), 1-3 (Praha: Odeon, 1930-31); *Nejmenší byt* (Praha: Petr, 1932).
28. Karel Teige, *Práce Jaromíra Krejčara* [The work of Jaromír Krejcar] (Praha: Petr, 1932).
29. Karel Teige, *Zabradní města nezaměstnaných* (Praha: Pavlová, 1933); *Architektura pravá a levá* (Praha: Levá Fronta, 1934).
30. Karel Teige, *Jarmark umění* (Praha: Odeon, 1936); *Vladimír Majakovský* (Praha: Prokopová, 1936).
31. "Jindřich Štyrský", manuscript 1946, 1948. Cited here from the exhibition catalogue *Od poetismu k surrealismu* (Brno: Dům umění města Brna, 1967), unpagged.
32. *Surrealismus v diskusi*. Ed. Karel Teige (Praha: Levá Fronta, 1934).
33. André Breton, *Co je surrealismus?* (Brno: Jícha, 1937).
34. Karel Teige, *Surrealismus proti proudu* (Praha Surrealistická skupina, 1938).
35. Quoted in the exhibition catalogue, *Od poetismu k surrealismu* (Brno: Dům umění města Brna, 1967). unpagged.
36. Karel Teige. *Výbor z díla*. [Selected works] Vol. 1, *Svět stavby a básně. Studie z dvacátých let*. [The world of construction and poetry. Essays from the twenties.] Vol. 2, *Zápas o smysl moderní tvorby. Studie z třicátých let*. [The struggle for the meaning of modern creation. Essays from the thirties.] (Praha: [Československý spisovatel, 1966-69.
37. Vítězslav Nezval, *Pražský chodec* (Praha: Borový, 1938). The title was originally used by Guillaume Apollinaire in his short story "Le passant de Prague", *L'Héresiarque et Cie* (Paris: Stock, 1910).

Human Rights inside the United Nations: The Humphrey Diaries, 1948-1959.

by A. J. Hobbins

This article is based on the diaries of John Humphrey, first Director of the Human Rights Division of the United Nations from 1946-1966. It is a continuation of an earlier work based on the Humphrey Papers dealing with the drafting process of the Universal Declaration of Human Rights in 1947. Humphrey began keeping a diary in August, 1948, and the first fourteen covering from then until 1959 are in the author's possession. While it is hoped these diaries will one day be published in full, this article concentrates on the adoption of the Universal Declaration, Humphrey's friendship with Gabrielle Roy, the difficulties associated with the investigations of U.N. personnel by the Federal Grand Jury and the Senate Subcommittee on Internal Security in 1952, and the conflict between the diplomatic role of the Secretary-General and the work of the Human Rights Division under Hammarskjöld.

Cet article repose sur les journaux intimes de John Humphrey, premier directeur de la Division des droits de l'homme des Nations unies de 1946 à 1966. Il fait suite aux recherches déjà effectuées dans le cadre du fonds Humphrey sur la rédaction de la Déclaration universelle des droits de l'homme de 1947. Humphrey a commencé à tenir son journal en août 1948 et les quatorze volumes allant de cette période jusqu'à 1959 sont en sa possession. Même si l'on espère que ces journaux seront un jour publiés dans leur intégralité, cet article est uniquement centré sur l'adoption de la Déclaration universelle, sur l'amitié d'Humphrey et de Gabrielle Roy, sur les difficultés nées des enquêtes menées en 1952 par le Federal Grand Jury et le Subcommittee on Internal Security du Sénat sur les membres des Nations unies ainsi que sur les conflits entre le rôle diplomatique du Secrétaire général et la division des droits de l'homme dirigée alors par Hammarskjöld.

Geneva, Aug. 3, 1948
Dinner at flat of Stephane and Vivia Hessel. Mendes-France and Laugier in argument re "troisième colosse". Laugier says that peoples of the world, including those of Russia and U.S.A., must be organized and united against the two governments that are responsible for present tension. The peoples of the world and the governments of the smaller countr[ies] do not want war. This a familiar theme in talks with Laugier who is looking for a spokesman for the "troisième colosse". But Mendes-France found the formula an over-simplification. No government, he says, not even

the American nor the Russian, wants war. In any event, France could not lead the "troisième colosse". "Pour la France il y a maintenant pas d'action internationale: il y a seulement une action interne".

Thus, almost "in medias res" as befits a work of epic proportion,¹ John Humphrey began the diary that he was to keep with relative faithfulness for at least eleven years, and of which an overview is given in this article. Humphrey, a graduate from four faculties of McGill University, had taught law at that institution from 1936 until he was named Dean of Law in 1946. As he was about to leave on a last vacation before taking up that office, he received a telephone call from an old friend, Henri Laugier.² Laugier, a

Frenchman, had spent part of the war in exile in Montreal, but was by then the Assistant Secretary-General in charge of Social Affairs for the fledgling United Nations. He asked Humphrey to become the first Director of the Human Rights Division in the U.N. Secretariat. When Humphrey accepted he interrupted a quiet academic life—which still continues—with a twenty year hiatus in the dizzying world of international affairs. One of his first tasks, after setting up the Division, was to aid in the process of getting the General Assembly to adopt an International Bill of Human Rights. Daily he found himself in contact with figures of world renown such as Eleanor Roosevelt, first Chairman of the U.N. Commission on Human Rights, and the French lawyer, René Cassin, later a Nobel Laureate for his work in the field. As Secretary of the Commission's Drafting Committee, Humphrey himself prepared the first draft of the Declaration.³ The work of refining and redrafting the document took the Commission a further eighteen months of arduous meetings on two continents. Much of the important work was done outside the formal meetings in the corridors or at the numerous cocktail parties and dinner engagements.

One such engagement took place in Geneva in August, 1948. Stephane Hessel, Laugier's Executive Assistant, held a dinner party at which a conversation between Laugier and Pierre Mendes-France, then the French Representative on the Economic and Social Council and later a socialist Prime Minister of his country, fascinated Humphrey. Here were two influential men arguing about whether France could lead a number of countries to form a third super-power to offset the influence of the United States and the Soviet Union, whose relationship it was feared would lead to another war. On returning home, Humphrey wrote his first entry in a plain spiral-bound stenographer's pad.

THE DIARIES

There are currently fourteen diaries, all on stenographer's pads, in the present author's possession covering the period August 3rd, 1948, to February 3rd, 1959. It is possible that more diaries exist, for Humphrey did not retire from the U.N. until 1966, but these

have not yet been found. The diaries follow the same pattern. Each spiral bound pad has the inclusive dates, residence addresses and sequence number on the front cover. Humphrey wrote the entries, some of which go on for several pages, late at night while his wife, Jeanne, was preparing to go to bed. The entries cover the day's business activities, luncheon and dinner engagements, as well as personal, cultural and social activities, with Humphrey's commentaries on any of the above. Humphrey is an astute observer of things, both animate and inanimate, and he is a man of strong opinions. His role as international civil servant prevented him from expressing these opinions in public on most occasions. One exception is found in the entry for Tuesday, December 7th, 1948.

Yesterday again the Committee sat until the middle of the night and I did not get to bed until 3.30 a.m. But we finally adopted the Universal Declaration of Human Rights—as it will now be called.⁴ There were no votes against but seven abstentions: the six Eastern European States and Canada. The Canadian vote came as a great surprise but I learned today that it will be changed when the declaration comes before the plenary.⁵ I am afraid that I exceeded my prerogatives as an international servant when afterwards I expressed my indignation to the Canadian representative. This has apparently caused some talk, because today I had the visit of a representative of the Canadian Press, sent to me strangely enough by the Canadian Delegation, who wanted me to say for publication in Canadian newspapers that I had been shocked by the Canadian vote. I had to give him a lecture on the status of an international official!

Restricted from public utterances, Humphrey used his diaries to express his candid feelings on all manner of issues. At the end of the first week of writing, he attempted to analyze his reason for starting the project:

Sunday, Aug. 8 [1948, Geneva]⁶

...

I should discipline myself to write essential things only in this diary.

Finished the volume 1939-1942 of Gide's Journal.⁷ It is merely a coincidence that I should have begun writing this diary while reading Gide. I have thought about keeping a diary ever since I entered the Secretariat on 1 August 1946. One of the things, apart from lack of time, that has kept me from it is my distrust of myself in writing. One neglects or is unable to put down the really important things; and how great a difference there is between what we really think and the interpretation of our thoughts that gets on paper! Laziness is partly responsible for this—but only partly.

He sometimes found the task difficult after busy days and late nights, both often filled with frustrations, as witnessed by the two following excerpts:

Aug. 13. [1948, Geneva]

There is a great similarity between the actions of nations and those of children. I could develop this thought at length were it not for the temptation of reading. Moreover, I am tired.

Aug. 21. [1948, Geneva]

It is I who am tired tonight. It is from fatigue that this diary suffers more than anything else. Many interesting things happen during the day, but when night comes I am too tired to write about them, and certainly too tired to think.

He quickly found that it was difficult to catch up if he did not force himself to make daily entries. The frailty of human memory also surprised him, when he wholly forgot things that should be familiar.

Basle, Aug. 29 [1948]

One of the unconvincing things about Simone de Beauvoir's immor-

tal Fosca is his prodigious memory.⁸

His mind retains everything from early days in Carmona up through the centuries. Had the author provided him with a human memory he would have born his immortality more lightly. My experiences of yesterday and today show some of the limitations of human memory.

So Humphrey persevered and produced a remarkable series of manuscripts which are of great value to the study of the United Nations' organization in general and its human rights activity in particular. This article will, of necessity, concentrate only on a few topics covered by the diaries: these include the adoption of the Universal Declaration of Human Rights, the response of the United Nations when the rights of its own employees were violated by the U.S. investigation into subversive activities, and the conflict under the Hammarskjöld regime between the codification of human rights and the diplomacy exercised by the Secretary-General.

PORTRAIT OF THE AUTHOR

Before embarking on any analysis of unfolding international events as witnessed by Humphrey, it is necessary to examine some of his background, inclinations and biases to place his perceptions in context. Humphrey is from New Brunswick and of Protestant stock. His first wife⁹, who was by his side during the whole period of his public life, was a French-Canadian Catholic and it was she who taught him the French which was to prove so useful later in life. They met on a ship when Humphrey made a trip to Europe on a McGill scholarship in 1929. They were married shortly afterwards¹⁰ in Paris in a civil ceremony conducted by the British Consul-General. Humphrey did not convert to Catholicism and the Church would not recognize the marriage, despite the couple's best efforts. When they left the church after an interview with a priest, Humphrey's sister, Ruth, took a photograph. This was sent to his parents-in-law, as yet unmet, with the notation "Jeanne and John coming out of the church", leaving his new relations to draw what conclusions they might. Humphrey is a

straight-forward man, but he is also a lawyer not above attempting to keep the social peace. His lack of a strong faith bothered but had not, to this point, changed him:

Sept. 8 [1948, Lauriot near Moëlau in Brittany]

...I was impressed by the sermon which was delivered by the rector of the seminary in Quimper. The theological structure (necessity of approaching God through the Virgin, etc. etc.) was artificial and could hardly be accepted by anyone of average intelligence, but the, to me, more profound theme was unattackable. There is something, which we have learned to call the Christian ethic (these are my own not the priest's words), without which life is mean and egotistical. It is mainly because, putting all his faith in the achievements of Science, man has forgotten this ethic that the world has gotten itself into its present mess. I profoundly believe that this is true. Surely a world that can achieve the atomic bomb but fail in the creation of the United Nations is morally bankrupt. And this moral bankruptcy is the reason for our failure to organize peace. I once thought that socialism could fill this moral gap; but now, although I still remain a socialist, I know better. For Socialism is a technique and nothing more. What we need is something like the Christian morality without the tommyrot.

Sept. 27 [1948, Paris]

There was a special mass at Notre Dame yesterday for the United Nations. We arrived very late, after Cardinal Suhard's¹¹ sermon; but we saw the procession which ended the ceremony and were given an opportunity to kiss the cardinal's ring. I shook his hand instead. Jeanne says that this was a gross breach of etiquette; but for me it was a matter of principle.

Politically, as noted above, Humphrey considered himself a socialist. This was not surprising for a life-long friend and colleague of Frank Scott,¹² one of the founders of the Cooperative Commonwealth Federation, Canada's first socialist party. Humphrey, Scott, King Gordon¹³, David Lewis¹⁴, Frank Underhill¹⁵ and Eugene Forsey¹⁶ had all been members of the League for Social Reconstruction, the intellectual precursor of the C.C.F. Humphrey's views by today's standards are tame and would be described as liberal. Yet in those days of McCarthy he was considered radical indeed. His inclusion of social and economic rights in the first draft of the declaration was thought of as communistic by many Americans, who wished—if they wished anything—a concentration on civil and political rights. He notes:

Paris, Sept. 21. [1948]

...

My attention has been drawn to a speech by the President of the American Bar Association, Frank E. Holman¹⁷, as reported in the N.Y. Times of Sept. 18. He says that the U.N. human rights programme is an attempt to establish State socialism "if not communism". Dolivet¹⁸ tells me that in another N.Y. paper he is reported as having mentioned me personally as having admitted the "revolutionary" character of the programme. Of course it will be revolutionary if we succeed; but there is nothing particularly revolutionary in what we have done up until now.

In July, 1947, Humphrey had addressed the American Academy of Political and Social Science at Ann Arbor. He felt the terminology he used—that what the United Nations was trying to do in the field of human rights was "revolutionary in character"—would be appropriate when addressing a gathering of scholars.¹⁹ This remark dogged him for all his public career, being a watchword for the right-wing opponents of the human rights programme. Even as late as 1962, Barry Goldwater was misquoting him and, with typical inaccuracy, assigning him the unusual and



Hernan Santa Cruz (right) and Humphrey (centre) appear unconvinced by Chairman Charles Malik's explanation after a meeting of the Commission on Human Rights in New York, 1952.

non-existent title of director of the Commission on Human Rights.²⁰

Humphrey is well read and the diaries keep us abreast of his reading matter and his opinions which, to be fair, he is capable of revising. For instance:

Wed. Nov. 3, 1948 [Paris]

...

I have begun reading Thomas l'imposteur by Jean Cocteau²¹ and intensely dislike what I have read so far.

Sat. Nov. 6 [1948, Paris]

...

I ... then read Gide's Journal which I had abandoned since Concarneau. How refreshing after Cocteau, who however I found somewhat better after the first pages.

Monday, Nov. 8 [1948, Paris]

...

Finished *Thomas l'Imposteur*—a better book than I thought it would be after the first few pages. But Cocteau is hardly a great writer.

The diaries abound with visits to the opera, the ballet, concerts and art galleries, as well as country walks where dozens of types of flora and fauna are enumerated. One example—his view of a Picasso exhibit—is typical:

Oct. 9 [1948, Paris]

...

We visited for a few minutes this afternoon an exhibition of Picasso paintings and drawings. I believe Picasso to be a great painter; but my honest reaction this afternoon was that he had done the things which we saw to pass the time and amuse himself—like a man who 'doodles' while listening to a speech—and perhaps even as a kind of joke on his indiscriminating admirers. If anyone else but Picasso had done these things one would not have given them a second look.

The large part of the diaries, however, deals with Humphrey's day-to-day work as Director of the Human Rights Division.

THE ECONOMIC AND SOCIAL COUNCIL

By August, 1948, the Human Rights Commission had forwarded its draft declaration to the Economic and Social Council (ECOSOC), which met in Geneva. Once considered by the Council it would be sent in turn to the General Assembly, which was to meet later that year in Paris. Charles Malik²², President of ECOSOC, also chaired the special human rights committee established to deal with the declaration. Humphrey began to find this phase of the process very frustrating.

Aug 5, 1948 [Geneva]

The special committee which the Council set up to study items on its agenda relating to human rights is now in its third week and is still considering the Report of the second session of the Commission on the Status of Women to which same report the Council also devoted many days at its sixth session. This means that there will remain very few days for study of other items: freedom of information, genocide and the draft Declaration of Human Rights. It would be unfair to blame the women for this. The Russians have used the occasion to attack the western powers, and particularly the U.S.A. Some of Pavlov's²³ interventions have lasted for an hour or more. But it is the president of the Council who is chiefly responsible for the situation. He invites debate, does little to direct the discussion, and tries to be everybody's friend. As a consequence the delegates ride off furiously in every direction.²⁴ Nor will Malik allow anyone else to preside over this particular committee.

...

August 6 [1948, Geneva]

After much procedural debate, the Human Rights Committee

decided yesterday that it would finish its debate on the status of women today, even if it had to sit through the night. Thanks mainly to the expectation of caviar and vodka at the Russian cocktail party this evening, we did manage to finish with most of the report at 6 p.m.

These last three weeks have been among the worst that I have spent at the U.N. Nothing could have been more artificial than this debate on the status of women, nor have I often witnessed more intellectual dishonesty. But Madame LeFaucheux²⁵, the chairman of the commission, is very pleased with the result.

Malik threatened to call off this afternoon's meeting unless we could find him a stop watch. I would have liked to call his bluff.

ECOSOC, through its special human rights committee, was perhaps attempting to do too much. In addition to the draft International Declaration of Human Rights, the committee had to deal with the report of the Commission on the Status of Women, the draft convention on genocide and three draft conventions on freedom of information.²⁶ Most of the debates concerned procedural rather than substantive matters, possibly with some intention of preventing the Declaration going to the General Assembly. Humphrey continued:

Aug. 9 [1948, Geneva]

The Human Rights Committee adopted today one paragraph of article one of the first of the three draft conventions before it. ..., I calculate that we will get the Declaration on H.R. and the Genocide Convention by about Christmas; but, alas, the Council will be in session for only a couple of weeks more.

...

Aug. 10. [1948, Geneva]

The situation in the h.r. committee becomes more and more serious. We have discussed freedom of

information for three days, but so far haven't adopted one article of the first of the three draft conventions. There has been a good deal of talk of sabotage, etc. I myself feel that it simply shows that the Ecosoc is not organized to do this kind of detailed drafting.

...

Aug. 17 [1948, Geneva]

...

The situation in the h.r. committee is due mainly to three things: 1) the failure of the president²⁷ to give lead [?] leadership or indeed even to preside, 2) simple lack of courage on the part of delegates when dealing with the Report of the Commission on the Status of Women, and 3) Pavlov, who has talked ten times at least as much as any other delegate. One of the interpreters is even reported to have described a conversation between Pavlov and other members of the Soviet delegation who were criticizing him because of his long-windedness and school-masterly manners. He seemed upset this afternoon and quite lost his temper once when Kotsnig²⁸ [i.e. Kotschnig] tried to inter[r]upt him on a point of order. This time at least he was not acting.

As time passed and pressure to complete business mounted, the Council began to consider either staying in session indefinitely or limiting its agenda to the Draft Declaration and postponing discussion on the conventions on genocide and freedom of information. Lightheadedness crept in.

Aug. 19. [1948, Geneva]

George Davidson²⁹ handed me the following during this morning's meeting of the h.r. committee:

Genocide Genocide
Ziss Boom Bah
Serve it up, serve it up
Raw, Raw, Raw
.....

Droits de l'Homme, Droits de
l'Homme
Servis plein de sang
Par le chef de délégation
P.C. Chang³⁰
.....
A little information
Can do a lot of harm
So turn the whole thing over
To the cominform.

During the same meeting both Pavlov and Katz-Suchy³¹ seriously argued that a convention ratified by two states only could not impose legal obligations. This can only be compared to the argument maintained by the same two yesterday that the sovereign and absolute right of States to refuse entry of foreigners into their territory cannot be interfered with by international treaty.

...

The Council did not complete its business, ultimately deciding to forward the Declaration and the conventions to the Third Committee of the General Assembly³² which was meeting later that year in Paris. Indeed ECOSOC did not change a word or comma in the texts of the Declaration and the Convention on Genocide that it had received. Humphrey left Geneva on August 28th, while the Council was still in session, to attend a conference³³ in Brussels and to take a three-week vacation before the General Assembly meeting.

A LITERARY INTERLUDE

During their vacation, the Humphreys arrived in the picturesque town of Concarneau, in Brittany. There Humphrey noticed, little escaping his eye, an unusual sight for that part of the world—a car bearing a licence plate from the Province of Manitoba in his native Canada.

Sept. 11, 1948 [Concarneau]

Shortly after our arrival in Concarneau³⁴ we noticed a car at the back of the hotel³⁵ with a Manitoba licence. I discovered that this belonged to a Dr. & Mrs.

Marcel Carbotte with whom we soon developed a speaking acquaintanceship. Last night we talked to them about Montreal and Canada in general. After retiring to our room I suddenly realized that Mrs. Carbotte must be Gabrielle Roy and so she turned out to be.

This afternoon we went for a long drive with the Carbottes, leaving the hotel at one and not returning until nine...

Gabrielle Roy seemed ill and unhappy. One felt that she would like to get back to Canada away from all these distractions.

Gabrielle Roy was a Franco-Manitoban, some four years younger than Humphrey. She had lived in France before 1939, and spent the war years in Montreal as a freelance writer. At the time she met the Humphreys, only her first novel—the award-winning *Bonheur d'occasion* (1945)—had been published. In August, 1947, she had married Marcel Carbotte, a Manitoba physician, and the next month they moved to Paris where the doctor was taking advanced medical studies at l'hôpital Broca.³⁶ It seems inevitable that the two couples, of a similar age and with much in common, should have spent time together.

Sept. 12 [1948, Concarneau]

...

Talked with the Carbottes in the evening. I introduced Mde. to the "Paroles" of Prevert³⁷ several of which she read aloud and very well. We talked about books and writers. I was impressed by her judgment and the profundity of her understanding—and also by a certain intellectualism that one would never suspect by a reading of "Bonheur d'Occasion".

Evidently *Bonheur d'occasion*, a story of grinding poverty in Montreal during the depression and the war, convinced Humphrey that Roy was likely to be more emotional and less intellectual than he found to be the case. The two couples separated having exchanged Paris addresses. At that time the Carbottes lived in the Hotel Lutetia on boulevard

Raspail, although in October they moved to a pension in Saint-Germain-en-Laye, some fifteen miles from Paris, where they remained until they left for Canada in 1950.³⁸ Humphrey renewed the acquaintanceship a week after his return to Paris.

Sept. 27 [1948, Paris. Date corrected in pencil to "le 26" probably by Jeanne Humphrey]

...
We lunched in a little restaurant in the Place St. André des Arts, and then picked up Gabrielle Carbotte at her hotel. Spent the afternoon and dined with her—or she dined with us. In the afternoon we met Peter Alyen³⁹ [i.e. Aylen] and his wife on the quais and the five of us returned to the same little restaurant for tea and ices. Had a passionate discussion with G.C. about the existence of God. While no longer a catholic she believes in the existence of God and even in some form of survival after death. My mind is completely open on the question of God's existence: I neither believe or disbelieve. But I am pretty sure that after death there is nothing. I used to think that proof might be found for these things; but I now realize that no man has ever discovered God by his intelligence. God, it seems, can only be discovered by an act of faith; and while I feel myself capable of such an act and know that I would be a happier man afterwards, I still cling to my intellect as my surest if imperfect guide.

...

Sept. 29. [1948, Paris]

...

On the suggestion of Gabrielle Carbotte I am reading, *L'homme et sa destinée* by Lecomté [i.e. Lecomté] du Noüy.

Pierre Lecomté du Noüy was a lawyer cum scientist turned philosopher. Before the war he had been Director of Biophysics at the Pasteur Institute in Paris and moved to the

United States during the war. His teleological studies led to the theory of telefinalism, as a goal of evolution. *L'homme et sa destinée* further developed his theories, attempting to substantiate the faith in the high destiny of man by giving it a scientific basis. This reading was a shrewd suggestion by Roy, given the tenor of her discussions with Humphrey, who was clearly a man who wanted faith if there could be an intellectual or scientific justification. Humphrey also invited Roy to take an interest in his work.

Oct 1. [1948, Paris]

...

Jeanne and Gabrielle Carbotte spent the afternoon in the First Committee⁴⁰ and we all dined together at the Palais⁴¹. Gabrielle seemed very excited about her experience.

Humphrey became quite fascinated by Lecomté du Noüy as the following entries indicate.

Oct 7. [1948, Paris]

...

Passages to remember from Lecomté du Noüy:

"Le Bien, c'est ce qui contribue au progrès de l'évolution ascendante et ce qui nous détache de l'animal pour nous entraîner vers la liberté.

Le Mal, c'est ce qui s'oppose à l'évolution et lui échappe par une régression vers la servitude ancestrale, vers la bête." p. 115

Oct. 9.

...

... This morning while listening to Chang I couldn't help thinking of the book that I am reading by Lecomté du Noüy. I leaned over to Laugier and inquired:

"Avez-vous lu Lecomté du Noüy, *La Destinée de l'Homme*?"

—Non. Et je suis résolu à ne pas le lire—

And then after an interval, Laugier said:

"J'ai empêché L.-d.-N d'être nommé professeur à l'Université de Montréal."⁴²



Eleanor Roosevelt welcomes Assistant Secretary-General Henri Laugier, still in a wheelchair, back to the Commission on Human Rights after his car accident. Laugier's assistant, Louis Gros (left), and Humphrey (right) look on.

I must ask Laugier the reason for this animosity. Surely it cannot be simply Laugier's agnosticism.

Saturday, Oct 16 [1948, Paris]

... I have finished *L'homme et sa destinée* by Lecomté du Noüy. That man has a great destiny, provided he does not destroy himself, I have no doubt.⁴³ I am even prepared to believe that this destiny is the purpose towards which Evolution is aiming and always has aimed. I also believe that every individual can make some contribution to the development of the race, and that he lives on as it were in that contribution. But what about the destiny of the individual, this "me"? It is little consolation for me to know (or to hope) that mankind has a great destiny, when I know that in a few years I shall have ceased to exist. As Gide says, what is interesting is man not mankind. And I am one of these men.

Fri. Oct. 22 [1984, Paris]

... Laugier says that he dislikes Lecomté du Noüy because 1) he was an indifferent scientist, 2) because he was a poor philosopher, and 3) because he supported the Vichy regime. I wonder.

One also wonders. Laugier was agnostic and fundamentally anti-clerical; it was doubtful he would see any need to substantiate faith through a scientific basis. Lecomté du Noüy's theories were also of such a nature as to defy scientific proof, whatever their inductive rationale. One might discount Laugier's view as a difference of philosophical opinion. The ascertainable facts are that Laugier left France in 1940 with the Free French returning after the war, while Lecomté du Noüy left in 1943 and never returned. Both men were in Montreal in May, 1943, when Lecomté du Noüy gave a series of nine lectures. In a posthumous biography,⁴⁴ Lecomté du Noüy's wife states that they aided the resistance and left France as refugees. She states that the follow-

ers of de Gaulle in the new world disliked him because he was anticommunist, although this seems implausible. She is silent as to why he never returned to France. If Humphrey resolved the question he did not confide the answer to his diary even when he re-read Lecomté du Noüy the next year. Gabrielle Roy herself merited one more, almost desultory, entry.

Wed. Nov. 3, 1948 [Paris]

...

We entertained Marcel and Gabrielle Carbotte at dinner, but came back to the hotel early.

Though they parted amicably and years later were to live in the same Province, Humphrey never saw Roy again. He became very busy with the work surrounding the Declaration and left Paris on December 12th, 1948, immediately after its adoption by the General Assembly.

THE UNIVERSAL DECLARATION

When the General Assembly met in Paris, the Third Committee concerned itself with the draft Declaration and other human rights documents. The officers were little to Humphrey's liking.

Sept. 28 [1948, Paris]

The Third Committee of the Assembly elected Mrs. Begtrup⁴⁵ as its vice-president and Senator Saint-Lot⁴⁶ of Haiti as its rapporteur this afternoon in an emotional outburst that completely disregarded competence and qualifications, the runners up being Thorne⁴⁷ [i.e. Thorn] of N.Z. and Dehousse⁴⁸ respectively. I, of course, have had some considerable experience of Mrs. Begtrup's capacities when she was Chairman of the Commission on the Status of Women. One can only hope that Malik's health remains good!⁴⁹

In the evening we went to hear Mrs. Roosevelt at the Sorbonne. The great amphitheatre was packed with an enthusiastic audience which gave her a reception the likes

of which I have never seen before. Ramandier,⁵⁰ Cassin, and the Recteur of the University⁵¹ spoke in glowing terms. But Mrs R. in spite of her appealing opening failed to seize the opportunity that had been provided for her. The crowd had come to hear the Chairman of the Human Rights Commission and the widow of a very great man. It heard a speech that had obviously been written by the State department and ninety per cent of which was devoted to an attack against the U.S.S.R. I do not blame the Americans for talking back; but I do regret that they are using Mrs. R. as their spokesman in these polemics. She had become a symbol that stood above this quarrel around which reasonable men and women could have rallied in a final effort to find a basis not for compromise so much perhaps as for an understanding. That position has been seriously shaken by tonight's speech.

This did not seem an auspicious start. The debates and discussions continued to be toruous but Malik, not, in Humphrey's view, a forceful chairman in Geneva, seemed to have altered his style when he chaired the Third Committee.

Oct 1, [1948, Paris]

General debate on human rights in the Third Committee this morning, most of the time being consumed by our Latin-American friends. A man named Moreno⁵² (delegate from Colombia) began a speech at 12.55 which lasted until afternoon. Why the other delegates remained in their seats I cannot imagine. Malik in adjourning the meeting drew attention to the article in the draft declaration which says that in the exercise of your rights you must respect the rights of others. This was much appreciated by the meeting with the exception, I imagine, of the Colombian.

...

Oct. 3 1.30 a.m. [1948, Paris]

...

The general debate on human rights continued yesterday morning and afternoon. The greatest danger that the declaration has to face at the moment, apart from Russian opposition, is the South American move to set up a sub-committee to compare our text with the Bogota declaration. It should be said to the credit of Santa Cruz⁵³ (Chile) that [he] pleaded with the other Latinos to abandon this idea; but I am afraid his plea fell upon deaf ears.

The Pact of Bogota, known formally as the Inter-American Treaty on Pacific Settlement, was negotiated at the 9th International Conference of American States (1948).⁵⁴ It included the American Declaration on the Rights and Duties of Man, which some delegations felt should serve as a model for the U.N. Declaration. This would have delayed the adoption, possibly indefinitely, and was no small threat since twenty of the fifty-nine delegations were from Latin America.

Oct 4. [1948, Paris]

...

The Third Committee finished its general discussion of the international declaration this afternoon, but we did not get down to an article by article study of the draft. What might be called the Bogota menace still hangs over us. Malik is doing better as a chairman and shows much more energy and leadership than at Geneva.

After a week, the committee decided to concentrate only on the Declaration, since Mrs. Roosevelt had explained that the Commission on Human Rights would not finish its work on the covenants until its next session. This turned out to have been an optimistic estimate as its work on these instruments was not completed until 1954.

Oct. 6 [1948, Paris]

Before adjourning this afternoon the Third Committee, after having decided to postpone consideration

of its preamble, finally began to study article one of the draft declaration. The amendments⁵⁵ to various articles are beginning to come in, and one wonders how it will be possible for the committee to deal with them all. Many of them are inspired by considerations of prestige. In other cases the authors are sincere but seem to be incapable of understanding that in a matter of this kind it is impossible for everyone to have his own way. The most sincere and best friends of the declaration keep quite [i.e. quiet] in the knowledge that in this way they can best promote its quick adoption.

One feature of this afternoon's debate was a shocking intervention by South Africa which wants to substitute "fundamental rights and freedoms" for "dignity and rights" in article one. The South African argument is that while equality may be admitted in so far as certain fundamental rights are concerned, the principle cannot be extended to all rights. This statement electrified the meeting and one had the feeling that everyone there, Mrs. Roosevelt and Pavlov included, was united in silent protest against it. The South African⁵⁶ however seemed unaffected by the atmosphere that he had created and did not even change his expression when the chairman pointed out that the word 'dignity' in the Charter owed its presence to General Smuts.⁵⁷ Malik by the way is doing much better as chairman. For one thing he does not seem to be so preoccupied with the necessity of making friends. Instead, on several occasions, as in the one mentioned above he has not been able to resist the temptation of making a brilliant remark at the expense of a member's feelings. Whom the gods would destroy they first drive mad.⁵⁸ I am told that the Latin Americans are particularly annoyed. But in this case the chair

has certainly been sufficiently provoked. Not only have the Latin Americans monopolized most of the debate up until now but they have created difficulty after difficulty. Unkind as the remark is it must be said that if we have an International Declaration of Human Rights it will be not because of them but in spite of them. They of course would be the first to deny this; and it can be guaranteed that their denial would be most eloquent and long winded.

Te Water's intervention forewarned the world that within two years the Population Registration Act (1950) and the Group Areas Act (1950) would make the shameful policy of apartheid a political fact of South African life.

The debate continued with agonizing slowness. One by one, each of the thirty-one⁵⁹ articles was examined *de novo* and adopted over a period of two months. Some nations, like the U.S.A. and the U.S.S.R. used the forum for political purposes, while others had reservations about the universal character of certain articles. The Islamic nations demurred at the equality given the sexes and, especially, the right to change religion which, it was said, ran contrary to the teachings of the Koran. South Africa pondered, in Orwellian terms, various degrees of equality. The Latin Americans, when their hopes for incorporation of the Bogota Declaration failed, seemed intent on demonstrating the superiority of Roman Catholic to communist philosophy. Malik became ever more forceful as chairman, driving the delegates to complete their task.

Tue. Nov. 2. [1948, Paris]

Malik lost his temper in the committee this afternoon, banging the table with his gavel, and refusing the right to speak to delegates. At Geneva he was weak and tried to make friends of everybody. Here he is rigid and authoritarian, and he has succeeded in making enemies right and left. I must say, however, that I have more sympathy for him now than ever before.

...

Finally, however, on December 6th, 1948, the work was completed and the text sent to the Plenary Session of the General Assembly for adoption.

Sat. Dec 11, 1948 [Paris]

The Universal Declaration of Human Rights has now been adopted; but the miracle for which some of us had hoped did not happen. For while there were no votes cast against the Declaration, the six Slav states,⁶⁰ South Africa and Saudi Arabia⁶¹ abstained. The debate in plenary was long but uninspired. I myself, who had gone to see the final act of the play, listened to very few of the speeches in full. One of the worst contributions was undoubtedly the Canadian—a niggardly acceptance of the Declaration because, it appeared from Mr. Pearson's⁶² speech, the Canadian government did not relish the thought of remaining in the company of those who, by abstaining in the vote, rejected it.

...

Humphrey's criticism of Pearson's speech is, perhaps, unduly harsh, showing the strain that Humphrey himself had been under and reflecting the shock of Canada's earlier abstention. It is true the speech was somewhat self-righteous concerning Canada's record on the treatment of its own subjects, provided an occasion for some anti-Soviet rhetoric, and contained some carping criticism of the language employed in the Declaration, with a rather facile suggestion as to how this could have been improved. Nonetheless, it stressed the extreme importance of the U.N. human rights initiatives and noted the Declaration "would mark a milestone in humanity's upward march".⁶³ The Humphreys left Paris for Rome the day following this entry.

TRYGVE LIE AND UN-AMERICAN ACTIVITIES

Humphrey served under three Secretaries-General of the United Nations, the first of whom was Trygve Lie.⁶⁴ Apart from a note

warning Humphrey, on his third day of work, about loose talk to the press,⁶⁵ his first major contact with Lie came two years later.

Thur. Oct. 21. [1948, Paris]

...
Around four o'clock Laugier left the meeting to see Mr. Lie. On his return he turned to me and said: "Le père Lie veut vous voir".

= Pourquoi? =

"Pour vous parler du mauvais temps et du beau temps".

Mr. Lie did not want to talk about the weather but about the top-ranking directorship in the Social Department. It appears that both the Poles and the Indians are pressing him to fill this vacancy with candidates from their countries; and, while he did not say so, I understood that neither of these candidates were suitable. One way to solve the problem would be to promote me to the post. Hence a series of questions about my administrative experience. Could I find someone to take my place as Director of the Division of Human Rights? Etc. I told Mr. Lie that I was not looking for the post, but that I would accept it if it were offered to me. He said that he would think it over.

It is apparent that Laugier would have recommended Humphrey strongly for the position and that this would have been acceptable to Lie. There was, however, opposition to his promotion.

Wed. Nov. 3, 1948 [Paris]

...
Laugier called me into his office this morning to tell me that it had been decided not to appoint me as his top-ranking director. I write down the story as he told it to me and do not know whether to be annoyed or pleased. At a meeting of the A.S.G.'s this morning, Mr. Lie said that he had decided not to appoint the Pole, Litauer,⁶⁶ to the post. It would be necessary to find



Humphrey (left) listens to René Cassin's point of view, when the latter chaired the Commission on Human Rights at Geneva in April, 1955. To Cassin's left is Mousheng Lin, a Social Affairs Officer in the U.N. Division of Human Rights.

someone who was already in the Secretariat. How about Humphrey? At the mention of my name there was a outburst of objections. The Division of Human Rights is one of the few divisions in the Secretariat that is well run. Humphrey is one of our best directors. It would be a mistake to transfer him from important and substantive work to an administrative job. Etc. Etc. I put this down as Laugier told it to me, but I suspect that there may be more to the story than what I have heard and that the version that has come to me has been affected by Laugier's friendship for me. I must say, moreover, that the whole thing sounds both illogical and unreal. But I can also say with the utmost honesty that I have never sought nor desired the post. If it had been offered to me I would have accepted it but only because I believe that one should not refuse responsibility. Insofar as my personal life is concerned I am sure that I will be happier where I am...

One cannot tell the truth of the matter any more than Humphrey could, although he believed the objections came from Abe Feller⁶⁷. Laugier may well have gilded the lily out of friendship. The suspicion remains that Lie was not a dominant man able to impose his views on others, but rather one who would seek compromise following the line of least resistance. The proof of this, for Humphrey, was to come four years later when McCarthyism arrived at the Secretariat.

The investigation concerning alleged subversive activities of American nationals working for the United Nations had begun in 1951. Humphrey hoped to have missed its worst excesses while out of the country. From October to December, 1952, the Senate Subcommittee on Internal Security began formal hearings on U.N. staff and Humphrey's hopes were dashed. The Human Rights Division was no exception to the prevailing right-wing view that the Secretariat was a base for anti-American activity. Laugier,

the Division's protector and defender, had by now been replaced as Assistant Secretary-General by Guillaume Georges-Picot,⁶⁸ an individual Humphrey had initially characterized as "a small man in a job much too big for him".⁶⁹ Yet Georges-Picot was not found wanting when the challenge came and Humphrey was to re-assess his opinion. Georges-Picot's first step was to establish a position which his Department would urge upon the Secretary-General.

Wed. 15 Oct. [1952, New York]

Georges-Picot, who continues to climb in my estimation, discussed with his directors this morning problems connected with the current investigations being carried [on] by the U.S. authorities of alleged American communists in the Secretariat. It was generally agreed that the S.G. should conduct his own investigations and that no one should be dismissed unless there were definite proof that the official had engaged in activities directed against the U.S. government. Mere membership in the communist party would not be sufficient.

Tue. 21 October. [1952, New York]

The great American witch hunt has finally reached the Division. Only last week I had been congratulating myself on our luck; for we, possibly one of the most vulnerable divisions in the Secretariat, had not been implicated in any way. But Phylis Chait, our administrative assistant, was subpoenaed to appear before a Federal Grand Jury today and will appear before the Senate Investigating Committee on Thursday.

Martin Hill⁷⁰ consulted me this afternoon on the whole situation. It appears that Mr. Lie is taking an important decision in the matter today. I repeated my conviction that the Secretary General should conduct his own inquiry, that the principle of guilt by association could

not be admitted, but that any official who can be proved to have engaged in activities directed against a member state should be discharged. I do not expect that this advice will be followed. It seems that Byron Price⁷¹ wants to dismiss without further ado all those who refuse to answer the question whether or not they are communists!

Lie's "important decision" was that members of the Secretariat could not claim immunity when questioned on private activities or those that pre-dated U.N. employment, thus confirming Humphrey's expectation.

At this time the U.S. was in the last stages of an election campaign. Humphrey wanted Stevenson and the Democrats to win for two reasons. Firstly a Democratic loss would mean the end of Eleanor Roosevelt's involvement with the Commission on Human Rights and she was someone for whom Humphrey had great admiration and respect. Secondly he felt that a Republican victory—the party of McCarthy and others he mistrusted and feared—would lead to a deterioration of East-West relations in general and the situation in the Secretariat in particular.

Sun. 26 Oct. [1952, New York]

I have never wanted to be an American, but I would certainly like to have a citizen's right to cast a vote on 4 November. The issues are indeed so great that all of us will be affected by the outcome.

I hope that the current hate campaign against the United Nations is nothing more than an oblique attack against the State Department as some people say it is. I fear that it is much more. If an unfortunate girl has an affair with a man who subsequently murders his wife, it becomes a reason for bringing the Organization into disrepute. A popular newspaper accuses delegates and officials of abusing N.Y. traffic laws. Traditional diplomatic courtesies are distorted. And a witch-hunting expedition has the U.N. as

a preferred target. Obviously we are not wanted here and it would be good for our souls to breathe freer air.

...

Ben Carruthers has been terminated ostensibly on the recommendation of the Walters Committee⁷² but really because of Palthey's⁷³ biased interpretation of that recommendation. I am very much afraid that I will not be able to do much for him because once the S.G. has taken a decision he is apt to hold to it...

Mon. 27 Oct. [1952, New York]

...

Have just listened to Senator McCarthy's speech⁷⁴ over the radio. The dishonesty of it was appalling.

To this point Lie had suspended, or dismissed in the case of temporary employees, U.S. nationals who either refused to testify or testified unsatisfactorily before the Senate Subcommittee on Internal Security. Concurrently the Walters Committee—a Special Selection Committee on Personnel Matters—was considering reorganization of the Secretariat and the reduction of staff. The State Department then began to hold talks with U.N. legal officials about the right of the Secretary-General to dismiss any employee without giving a reason.

Thur. 30 Oct. [1952, New York]

...

The situation in relation to the Secretariat becomes more difficult and more intolerable every day. It is now said that the Americans want the G.A. to give Lie the right to fire people without even stating cause. I hope that Lie will have the courage to resist all this pressure but it is unlikely that he will. Morale of the staff is at a very low level.

By the end of the year Lie was given those special powers, although an Appeals Board was established to hear the cases of permanent staff. The Secretariat continued to operate under the double strain of attack from without and management scrutiny from within.

Nov 12. [1952, New York]

...

The morale of the staff is at the lowest point in the history of the Secretariat. I suspect that Byron Price has more responsibility in all this business than anyone else.

Mr. Lie has resigned and there is talk of Entezam⁷⁵ as his successor.

Yes. And Stevenson has been defeated.

Humphrey clearly had a mistrust of Americans as represented by their government, especially a Republican one. This can be illustrated in another, very different, context. In 1978, the Parti Québécois had passed legislation to promote and protect the French language in Quebec, prohibiting use of other languages in certain situations. In a courageous move, Humphrey subsequently challenged Pierre-Marc Johnson, the Premier of Québec, on the philosophical basis of the law. He expressed the view that the government had made a profound mistake, since no good could ultimately come from subjugating the rights of the individual to those of the collectivity. To illustrate the distinction between the individual and the collectivity, he said that he liked and was personal friends with many Americans but as a nation they were much harder to like.⁷⁶ One individual American, whom Humphrey admired, came to a tragic end:

Thur. 13 Nov. [1952, New York]

...

Abe Feller committed suicide today. While nothing certain is yet known the tragedy apparently had its roots in a combination of overwork and implication in the current anti-red enquiries. His death is a tremendous loss to the Secretariat. I have always thought he had one of the best minds in the High Command to which he most certainly belonged. And on the whole I had great respect for him although I was not always in agreement with him.

Feller's suicide inevitably produced the completely unfounded accusations that he was

a subversive about to be exposed. It is now accepted without reservation that the strain of his job as U.N. General Counsel and Director of the Legal Department proved too much at this juncture. He, with Lie and Price, had been largely responsible for the establishment of the Secretariat staffing policy and recruitment, including its attendant liaison with national governments. Then the unenviable task of providing legal advice to Americans, who were employed by the Secretariat and were called to testify before the Grand Jury and Senate Subcommittee hearings, had fallen to him. Their problems could, at least partially, be traced to the policies Feller had initiated.

Shortly afterwards Lie began to drop hints that he would be prepared to serve his full term (to 1954) if an acceptable successor could not be found.

Monday 24 November. [1952, New York]

...

I am completely disgusted with Lie. It now appears that notwithstanding his resignation he is doing everything to stay on. Both Oscar Schacter⁷⁷—with whom I had lunch—and Georges-Picot told me this today. I only heard the other day about the scandalous firing of a coloured girl—Lie using his special powers for the purpose—because she had been going out with a Norwegian member of the Secretariat. This is unfortunately not just malicious gossip.

Lie's willingness to stay on became public knowledge the following month.⁷⁸

It was, therefore, a completely and uncharacteristically demoralized Humphrey who took his Christmas vacation in the Caribbean that year. He returned in January more fit for the coming fight. For Phylis Chait, accused of left wing sympathies, he could do nothing.⁷⁹ Carruthers was another matter since he was considered a risk on "moral" rather than ideological grounds, which, according to the dubious wisdom of the day, might render him vulnerable to blackmail. Humphrey felt that this



As the senior U.N. official present in Sweden on June 24th, 1962, Humphrey lays a floral tribute on Dag Hammarskjöld's tomb prior to reading a message from Acting Secretary- General U Thant. Humphrey was attending a two week U.N. seminar on judicial and other remedies against the abuse of administrative authority.

was totally irrelevant, even if true, since Carruthers knew no secrets about which to be blackmailed nor indeed did the Division possess any such secrets.⁸⁰ He appeared before the Appeals Board to contest the dismissal.

Wed. 28 Jan. [1953, New York]

Yesterday I appeared before the Board of Appeals and testified in the case of Carruthers. If my evidence were the only thing in the case he will certainly be reinstated.

Thur. 29 Jan. [1953, New York]

The Americans have begun to finger print their compatriots in the Secretariat; and Byron Price proudly presented himself to be the first victim. The thing that makes this crowning indignity most objectionable is that it is being done with Lie's approval and cooperation by U.N. officials and on U.N. premises.

Wed. 4 Feb. [1953, New York]

The Bureau of Personnel will apparently stoop to any depth in order to win its cases against dismissed officers who have gone before the Appeals Board. Thus, after hearing my evidence in the Carruthers case, Kraczkiewicz⁸¹ (apparently acting under instructions) reopened the case to say that when the S.G. decided to terminate Carruthers⁸² he had in mind budgetary factors and also his opinion that the work on which C. was engaged should be done in the D.P.I.⁸³ This, of course, is an *ex post facto* rationalization and, what is worse, a damned lie: for K. was in my office only the other day discussing candidates for the Carruthers post.

The witch hunt continued sporadically for the rest of the year, mostly concerning successful appeals, but the investigation turned to the scrutiny of other areas. The Grand Jury,

despite its presentment that there was "infiltration into the United Nations of an overwhelmingly large group of disloyal United States Citizens," did not bring a single indictment against any individual—although many careers were ruined—as a result of its hearings concerning U.N. personnel.⁸⁴

In defense of his role in the crisis, Lie stated his view that the eighteen U.N. permanent staff members, who had pleaded the Fifth Amendment, "had gravely and irresponsibly transgressed the Staff Regulations", "that they had not conducted themselves as international civil servants should", and that they tended "to discredit the Secretariat as a whole, to cast suspicion on all the staff and, still more serious, it imperilled the position of the Organization in the host country". He concluded that, once he had secured the authority, he had no option but to terminate the employees to preserve the position of the United Nations. He did, however, give the nine permanent employees the chance to reconsider and testify, but all refused the opportunity. He had already terminated all temporary employees in a similar situation, where no reason needed to be given and the case could not be appealed. He felt that letting people go quietly was a better way to handle this type of situation than the American Congressional approach, with all its attendant publicity.⁸⁵

Scholars, who have examined the question since, tend to come to conclusions more in keeping with Humphrey's view. Evan Luard notes that the employees had a perfect constitutional right to refuse to answer and that that refusal "in itself proved nothing about the suitability of such people to hold posts within the UN Secretariat: the Amendment would of course have no meaning at all if a refusal to answer was taken as a confession of guilt".⁸⁶ He continues:

Lie subsequently endorsed this view [of a carefully selected committee of jurists to advise him], saying that staff members had a "positive obligation to refrain from conduct which would draw upon themselves grave suspicion of being a danger to the security of a particular

state".⁸⁷ This was an extraordinary conclusion to draw on the basis of a single refusal, under an ancient constitutional safeguard, to answer questions, unaccompanied by the smallest evidence of subversive activity or other breach of duty.⁸⁸

James Barros, in a recent monograph examining Lie's role as Secretary-General, is more charitable. He summarized the events as follows:

A resolute and less pliant secretary-general might have handled the situation better, but it is doubtful that anyone could have long resisted the enormous pressure felt both from Congress and the American public.... Lie had not decked himself with glory, but the Truman administration, by not vetting Americans being recruited for the secretariat, had failed to give Lie the initial assistance he had requested. Compounded by demagoguery and the impact of the Korean war on American public opinion, events overtook both Lie and the Truman administration. On this matter, wisdom had been in short supply everywhere.⁸⁹

Barros concluded, however, that Lie's handling of the crisis was weak, his attempts to stay on pathetic, and his vilification of his successor sordid.⁹⁰ For an acceptable replacement was found for Lie, and Dag Hammarskjöld took office in April, 1953.

HAMMARSKJÖLD AND THE AERODYNAMICS OF HUMAN RIGHTS

Humphrey found in the new Secretary-General a man of quite different mettle, although he did not start working closely with him until 1954.

Friday 29 Jan. [1954, New York]

...

Much more important of course is the education of Hammarskjöld himself. He continues to be an enigma for me. That he is keenly

intelligent there can be no doubt. I also find myself in agreement with him on specific issues. But I wonder about the direction in which he is going. I sometimes think that his purpose is to reduce the non-political activities of the organization to a minimum.

Humphrey was not to be kept long in suspense. Hammarskjöld had inherited Lie's re-organization plan and had already begun to cut back on staff. Humphrey, in addition to his regular duties, had been acting principal director of the Social Department since August, 1953. He was, therefore, involved with making proposals about the organization of all Divisions within the Department.

Sun., 7 Feb. 1954. [New York]

I worked most of yesterday getting together my ideas for the suggestions that the Department will have to put forward to the S.G. for review of the human rights programme and reorganisation of the Division. According to Katzin⁹¹—the S.G. has never expressed himself so clearly on the question in my presence—the S.G. wants to relieve the Secretariat from some of its duties so that it can play a more important role in fixing policy. This sounds like rationalisation...

Sat. 13 March [1954, New York]

My experience of the last weeks would fill a chapter in a future history of the U.N. Secretariat. And that chapter, I am afraid, may prove to be a tragic one; for it looks more and more as if the S.G. intends to deliver a body blow.

On Tuesday he called me to his office "to acquaint me with his thinking" about the reorganisation of the Social Department. This thinking is not supposed to crystal[l]ize until Georges-Picot retires; but it is obvious that the S.G. had already established the broad lines of reorganisation in his mind even before he began his review.

The activities which will suffer most in the Social Department are population and human rights...

I warned him that as far as human rights at least are concerned he is making a great mistake. The work load should in fact increase as soon as the Commission finishes with the draft covenants. The S.G. therefore will merely expose himself to attack without being at all sure that he can achieve his objective. But I might just as well have saved my breath. He is very sure of himself and his mind is made up.

Two things that he said to me are worth putting down for the record. He would like to throw the Human Rights Covenants out of the window. I checked him up on this and suggested that a better policy would be to put them on ice until there is an improvement in the political climate. Later when boasting about what he called the successful elimination of the Department of Financial and Administrative Services, he said that he found that he could do himself everything that the A.S.G.⁹² had done in the past. This kind of activity, he said, was more useful than seeing delegations "which was a waste of time". That remark, I think, gives the true measure of the man. In spite of his brilliant mind and his possible (but yet unproved) administrative ability he lacks the qualities of statesmanship.

Thus Humphrey found that he and Hammarskjöld held radically opposing views on the best way to achieve peace and the place of the human rights programme in achieving this goal. Humphrey, the lawyer, felt the covenants were a vital component, giving teeth to the principles of the Declaration, which were not binding on any nation but were beginning to have the force of customary law. Apart from his desire to make economies through reorganization, Hammarskjöld felt that peace could best be assured through the Secretary-General engaging in high level shuttle diplomacy. Worse, he felt that the debates

concerning the covenants actually increased tensions between nations. He considered that human rights should not be a function of the U.N. but rather be under the auspices of some other international body, such as UNESCO. The situation deteriorated when Georges-Picot, not an admirer of Hammarskjöld, returned from his leave of absence. The diaries over the next few months tell an enthralling, though lengthy, tale of the struggle between the Secretary-General and those who would retain a significant role for the Human Rights Division, as well as the intrigues that went on in many areas as a result of the reorganization plan. The end result could be considered a draw. Hammarskjöld was able to cut back on the staff and influence of the Division, but it was not eliminated, reduced to section status, or placed under the auspices of another body.

1955 began with a replacement for Georges-Picot as Assistant Secretary-General and the end of Humphrey's position as acting principal director in the Social Department. Georges-Picot's successor, the economist Philippe de Seynes,⁹³ was less sympathetic to the human rights movement than Laugier and less adverse to the Secretary-General's policies than Georges-Picot. Humphrey continued to contemplate a return to academic life.

Thur 19 May [1955, New York]
... today I came to a decision which I think will stick. I will stay in the U.N. for 2½ years until the end of Hammarskjöld's term. If he is reappointed I will immediately resign. If he does not stay I will wait and see.

On June 15th, Humphrey had a long discussion with Hammarskjöld on the human rights programme. Hammarskjöld stated that his attitude towards the programme was determined by his concern for bigger issues. He wanted Humphrey to keep the programme going at the slowest pace possible, saying: "There is a flying speed below which an airplane will not remain in the air. I want you to keep the program at that speed and no greater".⁹⁴ For Hammarskjöld it came down to a question of aerodynamics—the efficiency and efficacy of the airplane of shuttle diplomacy

versus the pragmatic but ponderous flight of the covenants and other international instruments.

Thus began a long and uneasy phase in the history of the Human Rights Division. Humphrey saw his role as attempting to keep the programme going, at whatever speed, in the face of supervisory opposition. Eventually Humphrey brought things to a head:

New York. 23 Aug. [1955]

I asked Hammarskjöld today to find me another job where I could make a significant contribution. I said that I was not the kind of man that he needed to implement his present human rights policy, that I had come to the U.N. to do an important job, that I had done it well whatever he might think of the programme, and that I was not willing to share the fate of certain officials who had become prisoners of insignificant jobs and who continued to draw salaries while doing little more than routine work, if that. He seemed surprised at first and then said that he needed my "idealism" in the job. But after I insisted I was very serious he said that the next move was his. I did not go there to argue with him about his policies and resisted the temptation to answer some of his comments. His manner was frank and friendly and in spite of my disagreement with him on so many fundamentals I could not help liking him. I compare him very favourably to Georges-Picot and, of course, de Seynes.

I do not really expect anything to come of this *démarche*; but I feel better after having made it. I am never comfortable when sailing under false colours; and now Hammarskjöld knows exactly where I stand.

After this the relationship between Hammarskjöld and Humphrey appeared to ease. Hammarskjöld's "move" was long in coming. Two years later the Human Rights

Division was moved out of the Department of Economic and Social Affairs and placed under Sir Humphrey Trevelyan.⁹⁵ However, Humphrey felt that Hammarskjöld began to be less visibly opposed to the human rights programme at this juncture.⁹⁶ When Humphrey's deadline of two and a half years had passed, his thinking had altered:

Fri. 27, 1957. [September, New York]

...

Yesterday the Secretary General was unanimously re-elected for another term. It would certainly be wrong to say that he has become an enthusiastic supporter of the human rights programme; but there is very real evidence of an evolution in the right direction. For example, this summer he personally corrected a paragraph which Lin Mousheng⁹⁷ had prepared for the Introduction to the Annual Report; and by emphasizing the positive aspects of the programme showed his understanding of and sympathy with the new direction into which we are trying to steer it.

By the time Hammarskjöld was tragically killed in an air crash over Rhodesia, he had certainly gained a greater respect for the work of the Division and Humphrey had come to appreciate more the Secretary-General's diplomatic initiatives in the Congo crisis. If a lasting peace is one day achieved, only hindsight will tell us whether the words of the instruments or the tongues of the diplomats were the more efficacious in that achievement.

HOME THOUGHTS FROM ABROAD

Throughout his career at the U.N. Humphrey's thoughts often turned to McGill and the quieter world he had left behind. At first these were a source of comfort and enjoyment, when he took time out from his hectic schedule to socialize with former colleagues and students. These meetings always struck a positive note.

Oct 4. [1948, Paris]

Two of my old students from Law Faculty days, Choquette⁹⁸ and

The Humphrey Diaries, 1948-1959

Noble,⁹⁹ turned up at the Palais this morning. Took them out to lunch and had a long talk about McGill that refreshed me no end.

Monday, Oct. 18 [1948, Paris]

...

Had lunch with Ross Clarkson,¹⁰⁰ one of my old students at the Law Faculty. He won the gold medal at the final examinations last Spring. One of the best students I ever had.

Fri. Nov. 26 [1948, Paris]

...

Had two of my old students at the Law Faculty to dinner tonight: Bill Noble and Joan Gilchrist¹⁰¹—also an ex-Université de Montréal man called Fortier.¹⁰² I enjoyed the evening immensely.

A return to academic life had a very positive appeal even at an early stage when the U.N. work was exciting and interesting. When there was a possibility of a promotion he noted: "I am sure that I will be happier where I am—and I would be still happier were I back at McGill".¹⁰³ Later, during the demoralizing Un-American activity investigations and the cutbacks imposed by Hammarskjöld, Humphrey began to investigate actively the possibility of returning to McGill.

Montreal, Mon. 31 March. [1952]

We came up here last night on the "D & H"¹⁰⁴ after having dined with Claude¹⁰⁵ and Gerard. Magnificent view from the Division's offices before taking the train.

Had lunch with Cyril James¹⁰⁶ at the Ritz. There will be no difficulty about coming back to McGill.

...

Montreal, Tue., 1 April [1952]

...

I then called on Dean Meredith.¹⁰⁷ He was pleasant but did not commit himself. I feel however that there will be no difficulty about coming back to McGill if I still want to in the Fall of 1953.

Strangely enough my desire to come back is not nearly so strong. I have no intelligent reasons for this change in attitude. Today's inclination is to wait and see.

...

Wed. 2 April [1952, Montreal]

...

It must be admitted, however, that most of the talk¹⁰⁸ was about me—my job, the U.N., my thoughts about returning to McGill. A propos of this latter, I had a talk with Dean Meredith in the morning. It was satisfactory but non-committal.

...

Humphrey did not return to McGill in the Fall of 1953, although whether through his or Meredith's ambivalency is hard to say. The diary breaks off for a period of four months. The tale is taken up again in mid-August in Sandy Cove, Nova Scotia, but in a different vein. Thirty-seven different species of birds were seen, identified and described in almost ferocious detail, along with other commentary on the natural surroundings, but, for two weeks, no word of explanation. After the vacation Humphrey returned to New York.

60 Sutton Place South 18 Sept. (Thursday) [1952, New York]

When Jeanne asked me tonight why I didn't write in my journal anymore I replied that I had had enough of it and that I even intended to destroy it. And I may do precisely that. It contains too many snap judgements—some of them certainly unjust—about too many people.

Humphrey's criticism of the judgemental nature of the diaries is certainly valid, but that is also their value. His opinions, retrospectively formed and well considered, can be found in his books and other writings. Yet these memoirs would be tempered by hindsight, and reflect, for example, his evolving political orientation, literary tastes and religious convictions. It is also important to know how he, as with any recorder of events, felt at the time, regardless of how well- or ill-

conceived those feelings were. This knowledge can explain motivations and actions far more readily than reflections developed in tranquillity. It seems evident that posterity owes a debt to Jeanne Humphrey, herself a diarist, not only for allowing Humphrey sufficient time to make the entries, but also for the fact that he began writing again and did not destroy the diaries.¹⁰⁹ Away from Montreal he still thought fondly of McGill:

Thur. 30 Oct [1952, New York]
Yesterday at 6 Frank Scott, King Gordon and I had drinks together at the U.N. bar. It was a gay hour and took me right back to McGill.

In the Human Rights Division things remained dark in the early years of the Hammarskjöld regime. In retrospect, Humphrey does not consider the work he did on drafting the Declaration, or helping to get it and the covenants adopted, as his most significant contribution to the field of international human rights. These things were merely his job. He believes that keeping the Division going and the programme active in the face of very great difficulties to be the most important achievement of his public career.¹¹⁰ It is, perhaps, for this reason that he stayed on despite a continuing search for a suitable academic post at McGill or elsewhere, and the offer of other positions abroad. He remained at the U.N. until 1966, his compulsory retirement date, when he returned to McGill for the last time. Humphrey still teaches at his beloved Faculty of Law. In 1988, he was awarded the quinquennial U.N. Human Rights Award and still travels and lectures extensively at home and abroad.

ENVOI

The Humphrey diaries are a rich source for the study of the human rights activity of the U.N., regardless of the amount of caution required in their use. To date only Humphrey himself has used them in the preparation of the autobiographical account of his career, but they will soon be made available to other scholars. Part of their value lies in the fluency of language used and their great legibility. The reader can follow thoughts and emotions clearly, without the requirement of interpret-

ing staccato notes or obscure references. Humphrey wrote the diaries for himself, however, and not for posterity:

Sun. Nov. 14. [1948, Paris]

... Here ends the first book of this journal. When I began it three and a half months ago I hardly expected to persevere this long. But the fact is that I enjoy writing it and, if I live that long, I will enjoy still more reading it in twenty years.

One hopes that Humphrey still feels the same after forty years, as we read along with him.

* * * * *

Notes

1. Horace's dictum about the writing of epics, based on Homer's *Odyssey*, is that they should begin in the midst of things. *Ars Poetica* 148.
2. John P. Humphrey, *Human Rights and the United Nations: a Great Adventure* (Dobbs Ferry, N.Y.: Transnational Publishers, 1984), 1. Henri Laugier (1888-1973), after a distinguished pre-war academic career, went to the University of Algiers as Rector in the fall of 1943 and returned to France in 1944 after the liberation. He was U.N. Assistant Secretary-General from 1946-1951.
3. Alan John Hobbs, "René Cassin and the Daughter of Time: the First Draft of the Universal Declaration of Human Rights," *Fontanus* 2 (1989), 7-26.
4. It had previously been called the International Bill of Human Rights, and was to include covenants and means of implementation. As things turned out, only the Declaration was completed in 1948 and it was not until 1966 that the covenants were opened for signature.
5. Canada was not ostensibly opposed to any of the rights enumerated, but caught up in its peculiar national dilemma as to whether certain clauses dealt with rights that were under provincial rather than federal jurisdiction. The federal delegation stated that it did not feel it could vote for clauses where the jurisdiction was unclear or was certainly provincial. The president, John T. Hackett (1884-1986) of the Canadian Bar Association was, however, as opposed to U.N. human rights programme as his American counterpart [see infra note 17] and so the Canadian abstention may have reflected more than simply this jurisdictional concern. Humphrey, 79.
6. Humphrey used a variety of ways to express dates and these are given in this article as they appear. Although the year and place are usually clear from the context, these have been added in brackets [] for convenience in all places where omitted.
7. André Gide (1869-1951), *Journal, 1939-1942*. Paris: Gallimard, 1946.
8. Simone de Beauvoir (1908-1986), *Tous les hommes sont mortels*. Paris: Gallimard, 1946. Humphrey began reading this book, with its immortal protagonist, Fosca, on August 11th. By August 25th, he had pronounced it as a "poor book", an opinion shared by many contemporary critics.
9. Jeanne Marie Louise Godreau, who came from the lower St. Lawrence river in Quebec.
10. September 3rd, 1929.
11. Emmanuel Suhard (1874-1949) became a Cardinal in 1935 and was Archbishop of Paris from 1940 until his death.
12. Frank Scott (1899-1985) was a Canadian poet and constitutional lawyer. He was on the McGill Faculty of Law from 1928, serving as Dean (1961-1964).
13. (John) King Gordon (b. 1900) was a United Church minister and educator. He later served the United Nations in a number of capacities including work at the Division of Human Rights. His father, the Reverend Charles William Gordon (1860-1937), was better known by the pseudonym Ralph Connor, the author of many adventure books.
14. David Lewis (1909-1981) was an M.P. and national leader of the New Democratic Party, successor to the C.C.F.
15. Frank Underhill (1889-1971) was a noted historian and educator.
16. Eugene Forsey (1904-1991) was a Senator and former Director of Research of the Canadian Labour Congress and its precursor, 1942-1966.
17. Frank E. Holman (1886-1967) was an influential Seattle lawyer who, in addition to being President of the American Bar Association, had been on the American Bar Committee for Peace and Law through the United Nations (1946-47).
18. Louis Dolivet of France was international editor of *United Nations World*, a short-lived commercial journal not connected to the U.N.
19. American Academy of Political and Social Science. *Annals*, vol. 255 (1948), 21.

The Humphrey Diaries, 1948-1959

20. Barry Goldwater. *Why not Victory?* (New York: McGraw-Hill, 1962), 102.
21. Jean Cocteau (1889-1963), *Thomas l'imposteur*. Paris: Gallimard, 1948. Originally published in 1923.
22. Charles Malik (1906-1987) of the Lebanon was an enormously influential figure in United Nations human rights activity. He was Rapporteur of the Commission on Human Rights and became Chairman after Eleanor Roosevelt.
23. A.P. Pavlov, nephew of the famous physiologist and apparently mediocre inheritor of a great name, was becoming the principal Russian spokesperson on humanitarian issues, serving on the Commission on Human Rights, the ECOSOC Committee and the Third Committee of the General Assembly.
24. Humphrey had studied political science as an undergraduate under the celebrated Canadian humourist, Stephen Leacock (1869-1944). In *Nonsense Novels* (1911) Leacock wrote: "Lord Ronald said nothing: he flung himself from the room, flung himself upon his horse and rode madly off in all directions". According to *Colombo's Canadian Quotations* (Edmonton: Hurtig, 1974), 337, Theodore Roosevelt used the sentence in a speech and it is one of the few internationally known quotations of Canadian origin.
25. Marie-Hélène LeFauchoux (1904-1964) was the French delegate and Chairman of the Commission on the Status of Women. She was a member of the wartime resistance and wife of Pierre-André Lefauchoux, President of the Renault Automobile Works.
26. These three conventions, only one of which finally came into force, were forwarded from the Geneva Conference on Freedom of Information (1948).
27. Malik
28. Walter Maria Kotschnig (1901-1985), an Austrian-born naturalized American writer and diplomat, was then a deputy representative on the U.S. delegation to ECOSOC.
29. George Forrester Davidson (1909-) was Deputy Minister in the Department of National Health and Welfare and a member of the Canadian delegation to ECOSOC. He became President of ECOSOC in 1958.
30. P.C. Chang (1892-1957) of China was Vice-Chairman of the Commission on Human Rights and, according to Malik, never failed to broaden the perspectives of the drafters by frequent reference to the wisdom and philosophy of the Orient. Hobbins, 10.
31. Julius Katz-Suchy (1912-1971) was the Polish ambassador to the U.N. He defected to Denmark in 1970.
32. The Third Committee of the General Assembly dealt with social, cultural and humanitarian matters.
33. Humphrey represented the U.N. at the International Law Association Conference.
34. The Humphreys arrived in Concarneau on September 3rd, 1948, their nineteenth wedding anniversary.
35. Hotel de Cornouailles.
36. Gabrielle Roy (1909-1983), *Ma chère petite sœur; Lettres à Bernadette, 1943-1970* (Montréal: Boréal, 1988), 243.
37. Jacques Prévert (1900-1977) *Paroles*. Paris: Éditions du Point du Jour, 1947. Prévert was then a poet and short-story writer, who later became famous as a screen-writer. *Paroles* was a recent collection of his poems.
38. Roy, 243.
39. Peter Ayles (1910-1990) was a career U.N. official and, at the time, Director of the Radio Division in the Department of Public Information.
40. The First Committee of the General Assembly dealt with such political issues as disarmament and security.
41. Palais de Chaillot, where the General Assembly was in session.
42. When Laugier arrived in Washington early in the war, speaking no English, a position was found for him on the recommendation of the Rockefeller Institute as a professor of physiology at the Université de Montréal.

He had been a titular professor in this field at the University of Paris.

43. In this context "That man" clearly refers to mankind and not to Lecomté du Noüy. The controversial Lecomté du Noüy had, in fact, died over a year previously in New York City. His book was originally published in English and the French edition came out posthumously in 1948.

44. Mary Lecomté du Noüy, *The Road to Human Destiny* (New York: Longmans, 1955), 238ff.

45. Bodil Begtrup (1903-1987) was the first chairman of the Commission of the Status of Women and President of the Danish Council of Women. Later she was Danish ambassador to Switzerland (1956-1959) and Portugal (1968-1973).

46. Emile Saint-Lot (b. 1904) had been Dean of Law at Port-au-Prince and was a Haitian representative to the U.N.

47. James Thorn (1882-1956) was New Zealand delegate to ECOSOC and later chairman of the Council (1949).

48. Professor (later Senator) Fernand Dehousse (b. 1906) was the Belgian representative on the Human Rights Commission.

49. Humphrey's relationship with Begtrup as chairman of the Commission on the Status of Women had convinced him she would not be a good chairman in the upcoming debate, should Malik become indisposed and despite his soon-to-be-revised opinions on Malik. The alternative interpretation—that Begtrup's vice-chairmanship would make Malik ill—can be discounted.

50. Paul Ramandier (1888-1961) was a socialist French politician with ministerial appointments in both the Third and Fourth French Republics. He had been the first Prime Minister of the Fourth Republic (1947) and was, at this time, Minister of Defense.

51. Jean Sarrailh (1891-1964) was Rector of the University of Paris from 1947-1961, and later President of the French Commission to UNESCO.

52. Ramirez Moreno. The summary records of the 90th meeting indicate luncheon adjournment was at 1.30 p.m.

53. Herman Santa Cruz (1906-) was Chile's permanent representative to the United Nations and delegate to, later Chairman (1950) of, ECOSOC.

54. This conference also produced the basic constitution of the Organization of American States.

55. The Third Committee had to deal with one hundred and sixty-eight resolutions containing amendments.

56. Charles Theodore de Water (1887-1964), formerly President of the Assembly of the League of Nations (1933), was South African Ambassador at large (1948-49).

57. Jan Christian Smuts (1870-1950) was Premier of his country when he attended the San Francisco Conference in 1946, which created the United Nations, but had been defeated in the election of 1948. Usually known by his First World War British rank of general, he had been made a field-marshal in 1941.

58. This represents a fairly common maxim dating from the fifth century B.C., the version Humphrey cites being found in Longfellow's *The Masque of Pandora* pt. vi, line 158. Boswell *Life of Johnson* (Oxford, Clarendon, 1971, vol. IV, 181) described it as a phrase everybody repeats, but nobody knows where to find. It is now generally attributed to Euripides, although Plutarch (*Quomodo Adoloscens Poemata Audire Debeat* 106) states it is an adage of Aeschylus and others suggest Sophocles' *Antigone* as the source.

59. Owing to a British amendment in the Plenary, combining the second and third articles, the final Declaration had only thirty articles.

60. The Soviet Union, Ukraine, Czechoslovakia, Yugoslavia, Poland, and the Byelorussian S.S.R.

61. Saudi Arabia still believed that the provisions regarding the right to change religion ran contrary to the Koran. The fact that other

Islamic nations did not follow the Saudi lead can be credited to the defence of the Declaration offered in plenary by Sir Muhammad Zafrulla Khan (1893-1985), Pakistan Minister of Foreign Affairs and leader of its delegation to the U.N.

62. Lester B. "Mike" Pearson (1897-1972) was then Chairman of the Canadian delegation and Secretary of State for External Affairs. He was awarded the Nobel Peace Prize in 1957 and, later, became Prime Minister of Canada.

63. U.N. Document A/PV 182 10 December 1948.

64. Tryvge Lie (1896-1968) was a lawyer and politician, who had been Foreign Minister of the Norwegian government-in-exile during the war.

65. Part of an article in the *New York Times* (2 August 1946, p. 4.), which followed a quote from Humphrey, led some readers to believe he was responsible for the remaining unflattering sentiments about Assistant Secretary-General Arkady Sobolev (1903-1964).

66. Dr. Stefan Litauer (1892-1959) was an academic, journalist and diplomat, and at that time Minister-Counsellor and Chargé d'Affaires in Washington. He was "unsuitable" for the post because the State Department concluded his appointment would be detrimental to national security, and so put pressure on Lie to reject him. James Barros, *Tryvge Lie and the Cold War* (Dekalb, Ill.: Northern Illinois University Press, 1989), 313.

67. Humphrey, 3. Abraham Feller (1904-1952) was U.N. General Counsel and Director of the Legal Department from 1946-1952.

68. Guillaume Georges-Picot (b. 1898) of France was Assistant Secretary-General for Social Affairs from 1951-1954.

69. Diaries, 27 March 1952.

70. Martin Hill (1905-1976) was an Irish born British diplomat who had worked in the Secretariat of the League of Nations. His imposing title at the time was Deputy Executive Assistant to the Secretary-General

and Director of Co-ordination for Specialized Agencies and Economic and Social Matters.

71. Byron Price (1891-1981) of the U.S.A. was Assistant Secretary-General for Administration and Financial Services. He and Abe Feller [see *infra*] were the only U.S. nationals out of some three thousand to be cleared by the State Department prior to being hired by the U.N.

72. Named for its British chairman, Francis Walters (1888-1976), former Deputy Secretary-General of the League of Nations.

73. Georges Palthey (1910-) of France was Director of Personnel (1948-1954) and Deputy Director, later Deputy Director-General, of the U.N. Office at Geneva (1954-1973).

74. A \$50.00-a-plate "McCarthy Broadcast Dinner" at the Palmer House, Chicago.

75. Nasrollah Entezam (1900-1983?) was Iranian Ambassador to the U.S. and his country's representative to the U.N.

76. Pierre-Marc Johnson told this story on November 28, 1988, at a cocktail party held in his honour when he joined the McGill Faculty of Law. He added that, while he did not concede Humphrey's point, he looked forward to renewing the debate.

77. Oscar Schacter was Director of the General Legal Division of the Legal Department.

78. *New York Times* 4 December 1952, 2.

79. Chait was subsequently "exonerated" and spent her whole career in the Secretariat.

80. Lie himself was mystified by the American notion that the U.N. was bristling with secrets. He noted: "There was nothing to spy on in the United Nations. Governments did not give it secret information they wished to withhold. Its meetings and documentation were public property". Tryvge Lie, *In the Cause of Peace: Seven Years with the United Nations* (New York: Macmillan, 1954), 388.

81. Karol Kraczkiewicz, a Personnel Officer, who became Chief of Departmental and Staff Services, Office of Personnel, in 1954.

The Humphrey Diaries, 1948-1959

82. Ben Carruthers (1911-) left the U.N. in 1954, going on to an extremely successful career as a travel writer.
83. U.N. Department of Public Information.
84. Andrew Cordier and Wilder Foote, *Public Papers of the Secretaries-General of the United Nations*. Vol. I, 1946-1953 (New York: Columbia University Press, 1969), 498.
85. Lie, Chapter XXI "The Communist Issue in the Secretariat," 386-405.
86. Evan Luard, *A History of the United Nations* (New York: St. Martin's Press, 1982), vol. I., 354-5.
87. Lie, 396-7.
88. Luard, 355
89. Barros, 320
90. *Ibid*, 320-341. Lie made a concerted effort to stay on despite the opposition of all major powers and the Secretariat staff. He even stooped, when all else failed, to circulating rumours that Hammarskjold was homosexual.
91. Colonel Alfred G. Katzin of South Africa was Director of the Bureau of Personnel from April to December, 1954.
92. Byron Price recommended that his position and department be abolished upon his retirement. Hammarskjold was not slow to move on this suggestion.
93. Philippe de Seynes (1910-) of France was Under-Secretary (1955-1968) and Assistant Secretary-General for Economic and Social Affairs (1968-1974).
94. Humphrey, 205. Although the diary covers this meeting in detail, this quote is only found in Humphrey's book.
95. Sir Humphrey Trevelyan (1905-1985) was Under-Secretary for Special Political Affairs in 1958.
96. Humphrey, 208.
97. Mousheng Lin (b. 1906) had been recruited for the Human Rights Division by Humphrey, on P.C. Chang's recommendation, in 1949. He was the author of *Men and Ideas: an Informal History of Chinese Political Thought*.
98. Jerome Choquette (1928-) had graduated from the McGill Faculty of Law in 1948 and was attending the University of Paris. He is a former Quebec Minister of Justice (1970-1975) and Education (1975) and is currently the Mayor of Outremont, Quebec (1983-).
99. William R. Noble (1923-) took his BCL (1948) after war service with the Canadian Navy. He attended but did not complete courses at the University of Paris in 1948-49. Semi-retired, he still practices law in Montreal.
100. Ross T. Clarkson, QC (1922-) received his BCL (1948) and won the Elizabeth Torrence Gold Medal in Civil Law. He took a doctorate at the University of Paris. He is currently senior partner in the Montreal firm of McCarthy, Tetrault.
101. Joan C. Gilchrist (1915-) was a lieutenant in the Canadian Navy during the war and started at McGill (BCL, 1948) immediately afterwards. She took her doctorate in Paris and practised law in Montreal until she joined the family business. She retired to Victoria, B.C., in 1981.
102. D'Iberville Fortier (1926-) had graduated with an LL.B. from the Université de Montréal in 1948, and was studying in Paris. He was Canada's Official Languages Commissioner, 1984-1991.
103. Diaries, 3 November 1948.
104. Delaware and Hudson railway.
105. Claude Godreau, Humphrey's brother-in-law, and his friend, Gerard Pigeon.
106. Frank Cyril James (1903-1973) was Principal of McGill University from 1940-1962.
107. William Meridith (1904-1960) was Dean of Law from 1950-60.
108. With his sister, Ruth who arrived that day from Vancouver.

The Humphrey Diaries, 1948-1959

109. Jeanne Humphrey's influence can often be detected at points where writing the diary had become a chore and Humphrey contemplated abandoning it. For example the entry for June 15th, 1957, tells us: "Jeanne says that I should keep up this diary. The difficulty is that I am usually too tired in the evenings and think only of relaxation".

110. Humphrey, "The Dean who never was," First Annual Humphrey Human Rights Lecture, McGill Faculty of Law, 1989.

Notes and Comments

Early Children's Books in the McGill University Libraries

by Marilyn Cohen, *Head, Education Library*
and Jacqueline Reid-Walsh, *Lecturer, Faculty of Education*

When by these gentle ways he [the child] begins to be able to read, some easy pleasant Book suited to his Capacity, should be put into his Hands, wherein the entertainment that he finds, might draw him on, and reward his Pains in Reading, and yet not such as should fill his Head with perfectly useless trumpery, or lay the principles of Vice and Folly.

John Locke. *Some Thoughts Concerning Education*, 1693

Researchers of early children's literature can turn to a number of well known collections in Canada: The Osborne Collection, Boys and Girls House, Toronto Public Libraries, the Children's Literature Service at the National Library of Canada, the L.M. Montgomery Collection at the University of Guelph and the Arkley Collection at the University of British Columbia. Descriptions of these collections are available to scholars through various articles, books and bibliographies.

Among the treasures of McGill University Libraries are many early children's books with British, American and Canadian imprints, but because these are dispersed through several libraries their importance as a research collection has been overlooked. The two largest collections of early children's materials are housed in the Department of Rare Books and Special Collections and in the rare book section of the Library and Information Studies Library. While the majority of volumes in the Rare Books Department are identified in the catalogue as children's books, some of the most interesting finds were only discovered by leafing through numerous card catalogue drawers. They are classified under various other headings such as "First Editions" and "Colgate". Shelved in the rare book room of the Blacker-Wood Library are several fine examples of early natural science works intended for children. Those interested in Canadian children's literature will also find early works in the Lande Collection, as well as on the shelves of the McLennan Library. Late nineteenth and twentieth-century children's books are collected in three campus libraries: Education, McLennan and Library and Information Studies.

The McGill collection to date has received little critical attention. To increase awareness and improve bibliographic access to these materials we intend to compile an annotated bibliography of early children's books in the McGill Libraries. Our work has concentrated on locating, identifying and classifying these materials. This note, a progress report on our research, highlights some of the earlier volumes with British and American imprints housed in the Department of Rare Books, and the rare book collection in the Library and Information Studies Library. In this preliminary study we have found over 1,000 volumes that are pre World War I.

As one of the main sources of verification, we have used the catalogue of the *Osborne Collection of Early Children's Books*, and have adopted and modified its system of genre classification. The Osborne Collection is world renowned for its comprehensiveness and scope. Comprising over 15,000 volumes, the collection ranges from a fourteenth-century manuscript of Aesop's fables, through sixteenth-century courtesy books, eighteenth-century chapbooks, nineteenth and early twentieth-century adventure stories, and ends in 1910.

Notes and Comments

The history of the acquisition of early children's materials at McGill is somewhat obscure. There do not appear to be any papers that explicitly document the development of the collection. From a visit to the McGill Archives and a discussion with the former Rare Book Librarian it was discovered that many of these earlier works were acquired during the period Dr. Gerhard Lomer was University Librarian (1920-47) and Director of the Library School. He taught Children's Literature courses, and it would appear that his own personal interests influenced the purchase of many of the earlier works through the Friends of the Library Fund, for the Redpath Library.

Among the earliest and rarest items in the McGill Collection are the horn-books housed in the Department of Rare Books. These were the earliest lesson books made for children to use themselves. The horn-book was shaped like a racket or paddle and consisted of a recessed leaf of parchment or paper, secured all around by a narrow rim of copper fastened down with small tacks. Letters of the alphabet were written or etched on it, and many later ones also included a cross and the Lord's Prayer. Its name was derived from the thin transparent sheet of horn that was secured over the writing to protect the page from the child's hands. Andrew W. Tuer in *History of the Horn Book* explains that "a horn-book gradually came to mean an alphabetical tablet of any kind whether horn entered into the construction or not" (p. 5-6). The most common horn-books were made of wood or leather, the rarer of metal, ivory or bone. While a fine wooden sample is found in the Library Studies collection, there are three exquisite horn-books in Rare Books, one silver-plated, one of bone, and one of ivory dating back to the 17th century. It is interesting to note Eric Quayle's statement in *Early Children's Books: A Collector's Guide*, "There may have been ivory examples, but I know of none which have survived, although several set in silver—probably given to mark a special birthday and not meant for school use—can be seen in the showcases of museums" (p. 17). Our intention is to describe these fine specimens in detail in a future article.

Two early examples of instructional books written by schoolmasters are found in Rare Books. One is a first edition of *Cocker's morals; or the Muse's Spring Garden, adorned with many sententious disticks and poems in alphabetical order, fitted for the use of all publick and private grammar and writing schools*, (1675). Edward Cocker (1631-75), known also for *Cocker's Arithmetic*, was a celebrated writing master, and his name appeared on the title page of nearly 30 copy-books. The second, of related interest, is the work of another popular arithmetician Francis Walkingame (fl.1751-85) *The Tutor's Assistant, being a compendium of arithmetic and a complete question book* (1792), first published in 1751. Housed in Library Studies is a fine representative collection of *Pinnock's Catechisms*, a series of books of instruction with questions and answers. Eighty-three Catechisms were published under William Pinnock's (1782-1843) name; however, most of these works were written by specialists in the subject. Included among the titles are a *Catechism of Geometry* (1823) and a *Catechism of General Knowledge* (1822).

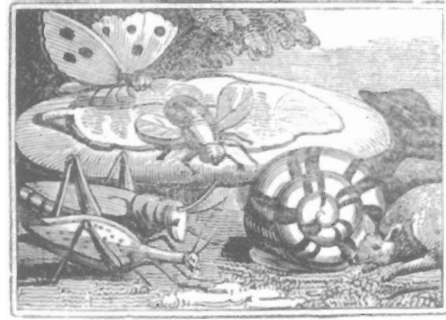
An exciting find in Rare Books is a first edition of John Locke's *Some Thoughts Concerning Education* (1693). Three hundred years ago, John Locke (1632-1704) celebrated philosopher and educationalist, advanced the revolutionary theory that instruction is best combined with entertainment. During this period the books intended for children were primarily instructional, moralistic or religious. Their only entertainment came from folk literature and inexpensive little pamphlets called chapbooks, which had filtered down to the child audience from adult popular culture. Locke's writings had an enormous influence on the rearing of English children, on the works of 18th and 19th century writers, and on the publishers of children's books.

John Newbery (1713-67), London bookseller in St. Paul's Churchyard and author, a disciple of Locke's, is acknowledged as the first publisher of children's books combining instruction with amusement. Attributed to Newbery is the tale of a young boy who desires to learn to read: *A History of Giles Gingerbread; a boy who lived upon learning* by Tom Trip (1764). A fine chapbook edition by Kendrew of York can be seen in Library Studies. As well there is an 1881

Notes and Comments



And the Snail with her horns,
Peeping out of a shell,
Came fatigued with the distance,
The length of an ell,



Mushroom the table,
And in it was spread
A Water-dock leaf,
Which their table-cloth
made.

Figure 1. An early chapbook edition of *Butterfly's Ball and Grasshopper's Feast*. London: Dean and Munday, [ca. 1815]. By William Roscoe.



THE
PEACOCK "AT HOME:
SEQUEL
TO THE
BUTTERFLY'S BALL.
WRITTEN
BY A LADY.
AND
ILLUSTRATED WITH ELEGANT ENGRAVINGS.
LONDON:
PRINTED FOR J. HARRIS, SUCCESSOR TO E. NEWBERRY AT THE
ORIGINAL JUVENILE LIBRARY, THE CORNER OF
21, FLEET'S CHURCH-YARD.
1808.

Figure 2. *The Peacock "At Home" A Sequel to the Butterfly's Ball*. London: J. Harris, 1808. By Catherine Ann Dorset.

Notes and Comments

facsimile edition of *Goody Two Shoes* (1765) published by Griffith and Farran, successors to Newbury and Harris, West Corner St. Paul's Churchyard.

The notable authors of the late 18th and early 19th centuries, mainly women, produced works of fiction that were clearly intended to educate and instil moral values and manners in children. Their writings were of two schools of thought, either of a theoretical non-religious nature, or infused with deep religious beliefs. Well known among the former are the books of the Edgeworths and Mary Wollstonecraft, who were influenced by the philosophy of Jean-Jacques Rousseau (1712-78) as well as by Locke. A first edition of Richard Lovell Edgeworth's (1744-1817) tale for children *Practical Education or, the History of Harry and Lucy*, volume 2 (1780) can be seen in Library Studies. Early editions of Maria Edgeworth's (1767-1840) *Parent's Assistant* (1796) and *Early Lessons* (1801) are also in Library Studies. A first edition of Maria Edgeworth's *Harry and Lucy Concluded* (1825) is housed in Rare Books. One of the most charming items in the Rare Book Collection is the first illustrated edition of Mary Wollstonecraft's *Original Stories from Real Life; with Conversations, calculated to regulate the affections and form the mind to truth and goodness* (1791) with delicate engravings by William Blake.

Among the most influential religious writers of the period were Anna Barbauld (1743-1825), Sarah Trimmer (1741-1810), and Mary Sherwood (1775-1851). Together with her brother John Aiken (1747-1822) Mrs. Barbauld wrote a compilation of short stories, plays and articles. Early editions of this work, *Evenings at Home; or the Juvenile budget opened, consisting of a variety of miscellaneous pieces for the instruction and amusement of young persons* (1796-98) are housed in Rare Books. Both collections also have early editions of the well known works of Mrs. Trimmer, among them her *Fabulous Histories* (1786) promoting kindness to animals, later known as *The History of the Robins*, and of Mrs. Sherwood who is remembered for her fierce evangelical zeal. Representative of her works is the 1818 edition of *The History of little Henry and his bearer* (1814).

Poetry for children encompasses the entire range of children's literature: religious instruction, moral education and pure entertainment. The McGill Collection has fine examples of each. Library Studies has a 1769 edition of Isaac Watts' (1674-1748) *Divine Songs Attempted in Easy Language for the Use of Children* (1715). Because Watts believed that children were naturally attracted to verse, he hoped the religious lessons thus imparted would be effortlessly and pleasurably retained, so providing "constant furniture" in child readers' minds. Another early example of devotional verse, found in Rare Books, is a 1793 edition of John Huddleston Wynne's (1743-88) *Choice Emblems, natural, historical, fabulous, moral and divine* (1775) presented in the tripartite form of the emblem book: illustration, moral and application.

Ann Taylor (1782-1866) and Jane Taylor (1783-1824) successfully continued both Isaac Watts' religious tradition and his polished verse form in *Original Poems for Infant Minds* (1804-05), *Rhymes for the Nursery* (1806) and *Hymns for Infant Minds* (1810). Library Studies has fine Victorian editions of these books. The Taylor sisters are major contributors to children's verse because of their focus on domestic and natural imagery in a strongly rhythmic, mnemonic form. Their most famous rhyme is "The Star," beginning "Twinkle, twinkle little star."

During the same period that the Taylor sisters were writing, William Roscoe (1753-1831) produced the first book of nonsense verse for children with *The Butterfly's Ball, and the Grasshopper's Feast* (1807). (Figure 1) An early illustrated booklet [ca. 1815] is housed in Library Studies, along with a sequel by Catherine Dorset (1750?-1817?) *The Peacock "At Home"* (1808), first published 1807. (Figure 2) The equal prominence of the delightful illustrations and text make these early examples of the picture book.

The collection in Rare Books is also enriched with a first edition of Christina Rossetti's (1830-94) *Goblin Market, and other Poems* (1862), with two magnificent Pre-Raphaelite designs by her brother Dante Gabriel Rossetti. The title work moves poetry for children beyond the

Notes and Comments

entertaining or the didactic with its compelling, disturbing narrative of archetypal greed and redemption. The end of the Victorian era is represented by the whimsical *In Fairyland* (1875), first published 1870, by William Allingham (1824-89) and illustrated by Richard Doyle. Housed in Rare Books, this poem was one of the initiators of the trend for "Fairie" verse which continued well into the 20th century.

Within the scope of this note it has only been possible to touch upon four genres: horn-books, books of instruction, stories pre- 1850 and poetry. These are representative of the wealth and breadth of early children's books in the McGill University Libraries. Hidden treasures such as the fine chapbook collection, works of famous illustrators, early children's periodicals, and adventure stories, to name but a few, deserve further attention, and will be highlighted in future research.

References

- Carpenter, Humphrey and Mari Prichard. *The Oxford Companion to Children's Literature*. Oxford: Oxford University Press, 1984.
- Darton, F. J. Harvey. *Children's Books in England; Five Centuries of Social Life*. 3rd ed. Cambridge: Cambridge University Press, 1982.
- Osborne Collection of Early Children's Books, 1566-1910; a Catalogue*. 2 vols. Toronto: Toronto Public Library, 1975.
- Quayle, Eric. *Early Children's Books: A Collector's Guide*. Newton Abbot, Devon: David and Charles, 1983.
- Tuer, Andrew W. *History of the Horn Book*. New York: Benjamin Blom, 1968.

A Portrait of Mary Todd Ferrier

by Conrad E. W. Graham

Registrar, McCord Museum of Canadian History

Mary Todd Ferrier (1799-1881)

oil on canvas, 1828

size: 76.2 × 63.5 cm.

inscribed on reverse: "Aged 28, 1828" artist: attributed to Levi Stevens (d. 1832)

purchase: Sotheby's Auction, Toronto, April 4, 1990

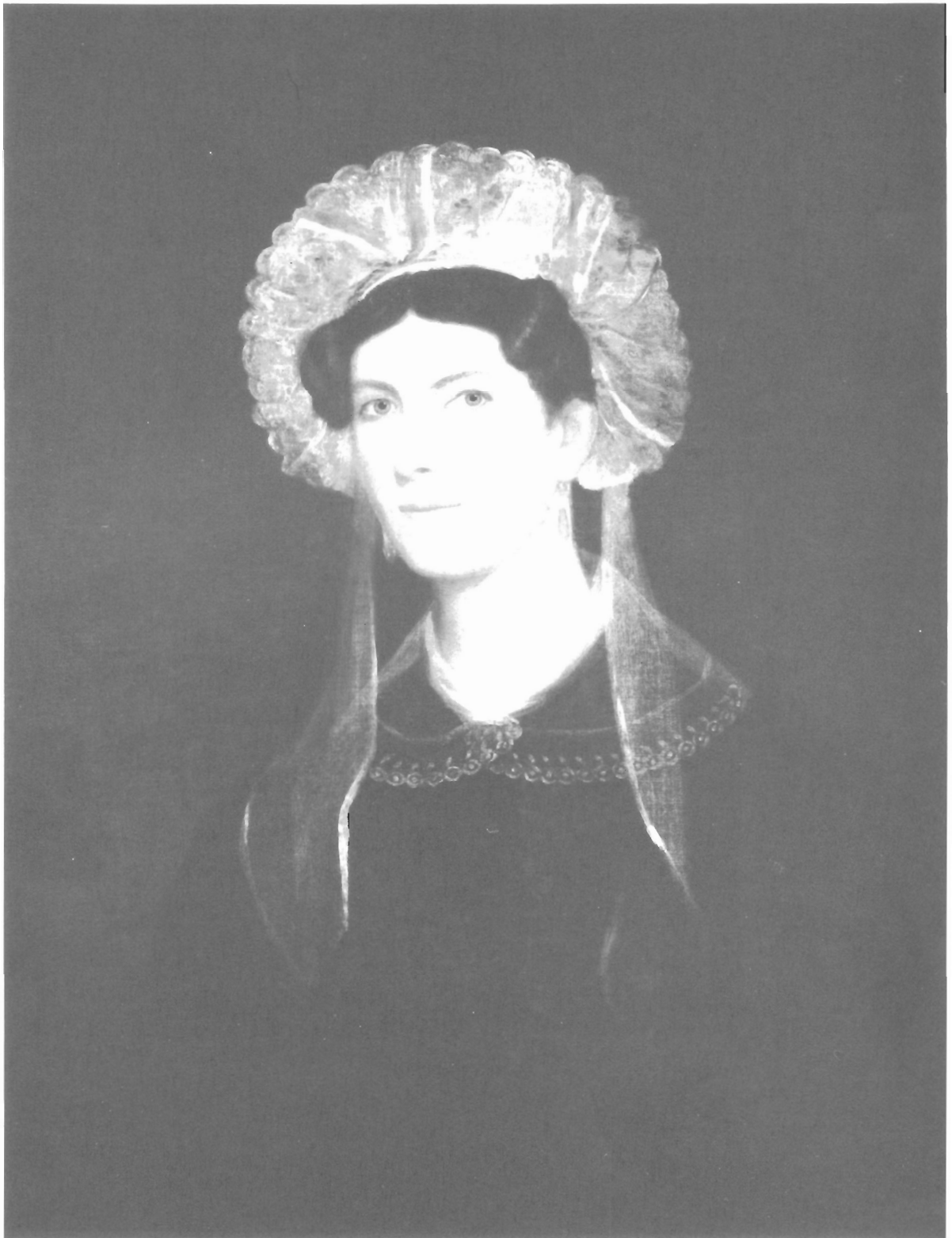
ex collection: John L. Russell

McCord Museum of Canadian History: M990.676.1

The portrait of Mary Todd Ferrier was purchased for the McCord collection at Sotheby's in Toronto on April 4, 1990. The acquisition of this portrait permitted the museum to re-unite a pair of portraits; as the portrait of her husband the Hon. James Ferrier (1800-1888), Chancellor of McGill University (1845-52) was already in the collection (M989X.76).

The painting shows a 3/4 face, waist to head portrait of a woman with a white gauze bonnet and wearing coral drop earrings. Her dress is black and rather severe but reflects the fashionable dress of the late 1820s.

Notes and Comments



Notes and Comments

The work is attributed to Levi Stevens (d. 1832), an artist working in Montreal as early as 1810 and who painted with a fine academic hand. His career is unfortunately, poorly documented and at present nothing is known of his early life. He died during the cholera epidemic of 1832 in Toronto.¹ The McCord has two other signed works by this artist (MEL985.162, MEL985.163).

The McCord Museum's portrait collection is one of the major holdings in the country and portrays many of the prominent Canadians of the 18th and 19th centuries.

Note

1. Harper, Russell. *Early Painters and Engravers in Canada*, University of Toronto Press, Toronto, 1970, p. 298.

Recent Additions to the David Hume Collection

by Bruce Whiteman

Head, Department of Rare Books and Special Collections

The collection of books by and about Scottish philosopher David Hume (1711-1776) is one of the major research collections in McGill's Department of Rare Books and Special Collections. It was begun in the late 1940s, and now contains the great majority of Hume's works in first editions, as well as later editions, translations, and many 18th-century commentaries on Hume. The book collection also contains a number of items from Hume's library with his bookplate, and is supplemented by a group of 50 autograph letters, mainly addressed to Hume's friend the Countess de Boufflers.

The collection has benefited recently from two grants given by the Social Sciences and Humanities Research Council of Canada (SSHRC), the first in 1989 under the "Support to Specialized Collections Program" and the second in 1990 under the "Fleeting Opportunities Program."

The second grant allowed the Department of Rare Books to acquire a collection of 26 pamphlets and broadsides relating to the *Douglas* controversy of 1757 with which Hume was embroiled. His relative, John Home, had his play *Douglas* staged in Edinburgh beginning on December 14, 1756. Home was a clergyman, and the Church of Scotland's anathema against the theatre led to a controversy that produced a great many printed items. Hume himself contributed to the war by dedicating his *Four Dissertations* (1757) to Home, and, as Hume's biographer has noted, "republishing of the dedication in several of the weeklies and monthlies at both London and Edinburgh must have circulated it far beyond the sphere of those purchasing copies of *Four Dissertations*."¹

The *Douglas*-related material acquired for McGill includes a copy of the first Edinburgh edition of the play (1757). A copy of the London edition of the same year, which may have bibliographical priority (though Gerald D. Parker chose the Edinburgh edition as his copy-text for the 1972 scholarly edition), was already in the Department of Rare Books' collection.

Notes and Comments

Both sides of the controversy over *Douglas* are represented in the collection. As defenders of Home one finds, for example, Alexander Carlyle's satirical *An Argument To Prove That the Tragedy of Douglas Ought to Be Publicly Burnt By the Hands of the Hangman* (Edinburgh, 1757) and John Maclaurin's *The Deposition, or Fatal Miscarriage: A Tragedy* (Edinburgh, 1757), a satirical play about Home's treatment by the Church. The opposing side is perhaps better represented, and includes among other pieces *The Player's Scourge; Or a Detection of the Ranting Prophanity and Regnant Impiety of Stage Plays, and Their Wicked Encouragers and Frequenters; And Especially Against the Nine Prophane Pagan Priests, Falsely Called Ministers of the Gospel, Who Countenanced the Thrice Cursed Tragedy Called Douglas* by John Haldane, apparently a mad upholsterer, and John Witherspoon's *A Serious Enquiry Into the Nature and Effects of the Stage, Being an Attempt to Show, That Contributing to the Support of a Public Theatre, Is Inconsistent with the Character of a Christian* (both published in Edinburgh in 1757). These pamphlets are accompanied by a number of leaflets and broadsides of songs, poems and advertisements relating to *Douglas*, of which two are unrecorded and several are known in only one or two copies. This collection joins a bound group of eight other *Douglas*-related pamphlets acquired in 1987, a volume which bears the bookplate of Baron Hume, David Hume's nephew.

Funds from the earlier SSHRC grant have been used to acquire 18th-century books by and concerning Hume, with an unpredicted emphasis on continental translations. A copy of the third edition (1754) of the *Political Discourses* was acquired (copies of the first two editions already formed part of the collection), as well as copies of translations into French (*Discours politiques de Monsieur Hume*, Dresden, 1755) and Italian (*Saggi politici sopra il commercio*, [Venice?], 1767, and Parma, 1798). A set of the uncommon Dublin edition of *The History of England* (1772) was added to the collection, in addition to a set of a French translation unknown to Jessop,² published in Yverdon in 1781, and two earlier French translations of individual parts of the work: *Histoire de la maison de Stuart sur le trone d'Angleterre* (Londres, 1763) and *Histoire de la maison de Plantagenet sur le trone d'Angleterre* (Amsterdam, 1765). Two Basle editions of Hume were acquired, a 1793 edition of the *Essays and Treatises on Several Subjects* and an unauthorized 1799 edition of the *Essays on Suicide and the Immortality of the Soul*. Three other French translations were also bought: the first French edition of Hume's autobiography, *Vie de David Hume, écrite par lui-même* (Londres, 1777), the 1788 "Londres" edition of the *Oeuvres philosophiques*, and the first French edition of the *Essais philosophiques sur l'entendement humain*, which forms part of the *Oeuvres* published by Schneider in Amsterdam in the years 1758-60.

Of the two rarest items acquired for the collection, the first is a copy of Todd's D issue³ of *A True Account of the Behaviour and Conduct of Archibald Stewart, Esq.* (London, 1748). Stewart, Hume's friend and benefactor and Lord Provost of Edinburgh, was accused of surrendering the city to the Young Pretender and was tried on 12 related charges in 1747. Hume's pamphlet was written in his defence, and includes a postscript added after he learned in early November of Stewart's acquittal.⁴ The second piece is a copy of *Sister Peg*, or more fully, *The History of the Proceedings in the Case of Margaret, Commonly Called Peg, Only Lawful Sister to John Bull, Esq.* (London, 1761). The authorship of this uncommon book has been much disputed, and though David Raynor attributes it to Hume in his 1982 edition published by Cambridge University Press, many Hume scholars continue to hold that Adam Ferguson, not Hume, was its author. The McGill copy comes from the library of W.R. Scott, the author of a biography of Francis Hutcheson.

It has proved difficult to find copies of most of the 18th-century "Humeana" lacking from the collection, but four interesting items have been acquired all the same. William Harris's *An Historical and Critical Account of the Life and Writings of Charles I* (London, 1758) includes an early mention of Hume's *History of England*. Joseph Priestley's *Letters to a Philosophical Unbeliever* (Bath, 1780) comments extensively on Hume's treatment of natural religion, as does Joseph Milner's *Gibbon's Account of Christianity Considered, Together With Some Strictures on*

Notes and Comments

Hume's Dialogues Concerning Natural Religion (York, 1781). Finally, a copy was acquired of one of the earliest German works on Hume, Friedrich Heinrich Jacobi's *David Hume uber den Glauben, oder Idealismus und Realismus* (Breslau, 1787).

The McGill Hume collection is among the very best in the world, and it continues to grow. The entire collection will be catalogued by mid-1991 and is available to scholars, students and interested persons for consultation in the Department of Rare Books and Special Collections.

Notes

1. Ernest Campbell Mossner, *The Life of David Hume* (Austin: University of Texas Press, 1954), p. 362.
2. T.E. Jessop, *A Bibliography of David Hume and of Scottish Philosophy From Francis Hutcheson to Lord Balfour* (New York: Russell & Russell, 1966).
3. William B. Todd, "David Hume: A preliminary Bibliography," in *Hume and the Enlightenment: Essays Presented to Ernest Campbell Mossner*, ed. William B. Todd (Edinburgh: Edinburgh University Press, 1974), pp. 192-3.
4. Mossner, pp. 182-6.

Moshe Safdie's Archive

by Irena Murray

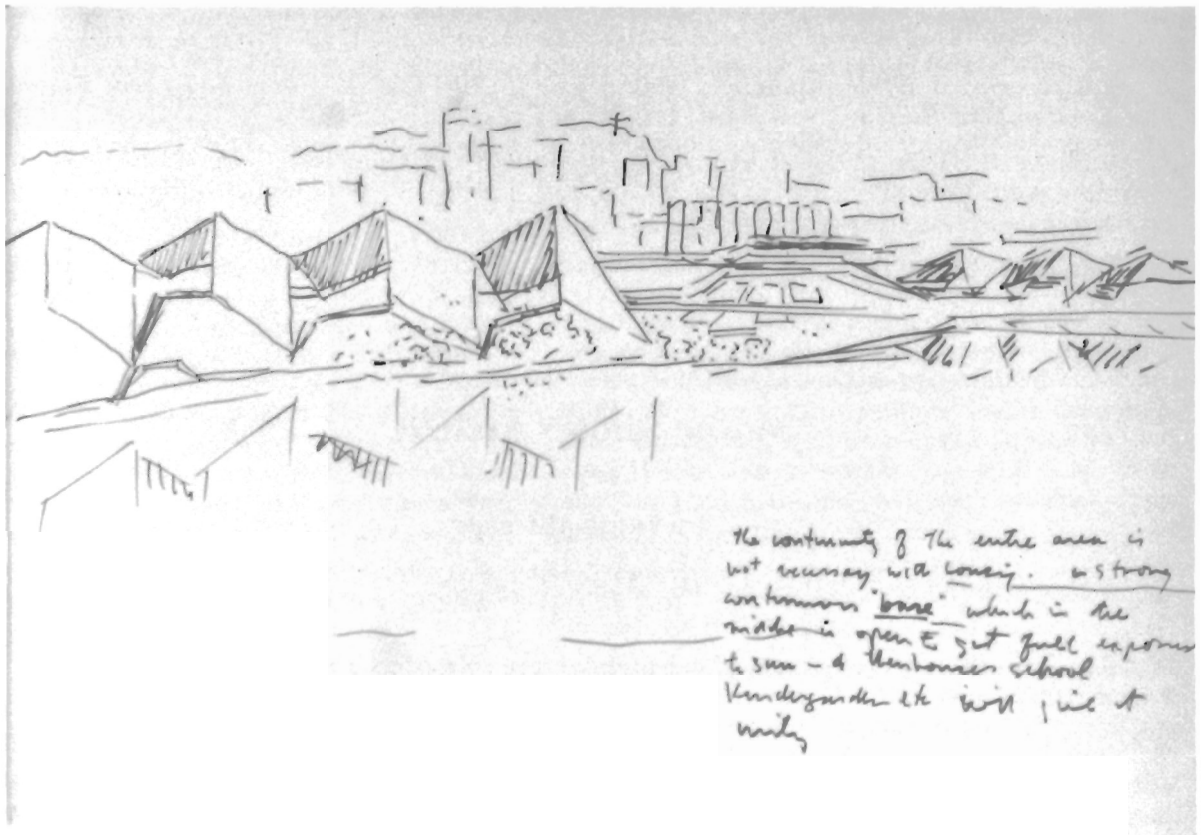
Head, Blackader-Lauterman Library of Architecture and Art

A key event in the development of our architecture collections took place in the Blackader-Lauterman Library of Architecture and Art last year. In December 1990, after four years of negotiations, architect, author and educator Moshe Safdie, B.Arch. '61, LL.D. (honoris causa) '82, signed an agreement which made the University the sole depository for the extensive archive of his work. When fully constituted, Mr. Safdie's archive will not only include architectural plans, drawings, models, slides, photographs, and office files for all his projects, but also personal sketchbooks, manuscripts of books, correspondence, lectures, films, tapes, diskettes, and other research material, documenting the many aspects of Safdie's work.

The Canadian Architecture Collection (CAC) of the Blackader Library will face the challenge of organizing and describing the Safdie projects, to make them accessible to students and researchers. In order to cope with the sheer quantity and variety of material, a series of shipments is being planned by Safdie's principal offices in Boston and Jerusalem. The first shipment, received in February, consisted of two Canadian projects emblematic of Safdie's career: Habitat '67 and the National Gallery of Canada. Close to 150 rolls of architectural drawings and prints, 26 cartons of project files, 7 sketchbooks, as well as small architectural models of the National Gallery spaces provide a unique insight in the creative process of the author of *Beyond Habitat*, *For Everyone a Garden*, *Form and Purpose*, *The Harvard Jerusalem Studio*, *Beyond Habitat by Twenty Years*, and, most recently, *Jerusalem: The Future of the Past*.

Notes and Comments

The Safdie donation is of great significance for many reasons. The archive represents more than twenty-five years of practice, teaching and writing of one of McGill's most famous graduates. The exceptional quantity, variety and richness of material in the archive will provide architecture students, historians and curators with some unique teaching and research opportunities. Canadian projects such as Habitat '67, the National Gallery, the Musée de la Civilisation in Quebec City, the extension to the Musée des Beaux Arts de Montréal, the Ballet Opera House in Toronto, or the Ottawa City Hall will form an important part of our heritage, but they will also be examined in the context of Mr. Safdie's international practice. Mr. Safdie's academic career, which began at McGill in 1970, and included professorships at Yale, Ben Gurion University in Israel, and Harvard, will also be documented in the archive.



From the beginning, a close relationship has been established between the Canadian Architecture Collection and the office of Moshe Safdie and Associates. The U.S. office has volunteered to make available their inventory software to the library, and its staff is looking for the best way in which diskettes containing the Computer-Assisted Designs (CAD) can be consulted as part of the Safdie archive. The cooperation between the library and the practice will make adding new projects and documentary material easier, as well as enhance our understanding of Safdie's work.

Chronicle

The value of a research library is often measured by its actual size in terms of volumes. Equally important, however, is the rate of growth of its collection. Additions are made through acquisitions supported by books and periodicals budgets, endowed funds, grants and donations. During times of budget restraints and government cut-backs, donations from private donors, alumni, professors, librarians and benefactors are absolutely vital. To this must be added several special grants: Social Sciences and Humanities Research Council of Canada (SSHRC), IMASCO, the New York Chapter of the Friends of McGill University, and the McGill Associates.

The following list represents a selection of significant and unusual items acquired by McGill libraries, archives and museums during 1990. This array of interesting acquisitions gives an impression of not just the quantity, but, also the quality of the McGill collections.

The Blackader-Lauterman Library of Architecture and Art

One of the most notable acquisitions during the past year was the microfilm of the Fowler Collection of Early Architectural Books. This collection of rare primary source materials of master architects, from the major countries of Europe, documents the early influences of engineering and design in architecture. Beginning with Alberti's *De Re Aedificatoria* (1485)—the first printed book on architecture—this microfilm collection includes 482 works by many notable architects including Renaissance masters such as Vitruvius, Alberti, Vignolo, Scamozzi, Palladio and Serlio.

The collection covers works on architecture to the end of the 18th century (when revivals began to replace the Renaissance style of architecture); written descriptions are provided with illustrations to clarify the text. Volumes of plates and blockprints reviewing the more contemporary designs of buildings, temples, tombs, and gardens appeared toward the end of the 16th century, and are also present on the microfilm. In these cases, texts provide an identification and explanation of the visual material.

These 482 titles on microfilm represent the original Fowler Collection donated in 1945 to the Johns Hopkins University, as well as additional works. The collection will complement Blackader's extensive holdings of rare architectural treatises which form the core of McGill's graduate program in architectural history and theory.

Other important acquisitions include:

Law professor John Durnford donated drawings, specifications and correspondence by A. T. G. Durnford (1898-1973) for the Stairs House, Montreal.

Mrs. R. Affleck donated drawings by her husband, Raymond Affleck (1922-1989), one of the founders of the architectural firm ARCOP, and one of Montreal's best known architects. Among the works given to the archive are drawings for the Affleck House in Westmount; the Maritime Museum, Halifax, N.S.; St. George's School, Montreal; the Aldo House, Montreal; Place Ville Marie, Montreal; Place Bonaventure, Montreal; and Théâtre St. Denis, Montreal.

John N. Mappin donated material from the estate of Fred Taylor, Canadian artist and educator. Included in the donation are reproductions of Taylor's paintings, accounting records, and correspondence (primarily with art galleries and museums).

This year's donation to the Edward & W. S. Maxwell archive includes a colour photograph of the Shrine of the Bab, Haifa, Israel and a draughtman's book. These items further our understanding of the life and work of Edward & W. S. Maxwell.

Chronicle

Arthur Erickson Architects Ltd. has donated additional material relating to their work in the Middle East. This new material includes slides, photographs and project reports from the following projects: the Sawaber Project (National Housing Authority, Kuwait), the Fintas Centre (Municipality of Kuwait, Kuwait), and the Islamic University of Madinah (Madinah, Saudi Arabia).

Professor B. Anderson of the School of Architecture has donated watercolours, sketches and drawings by architect Randolph C. Betts (1902-). He has also donated the original drawings for the Argyle School (Selwyn House), designed by architects C. R. Tetley (1886-1960) and H. Ross Wiggs (1895-1986).

Also of significance is the recent addition of material to the Gordon Webber collection housed in the Canadian Architecture Collection (CAC). Original paintings, drawings, sketches, colour slides and negatives by Gordon Webber, an artist and educator at McGill for twenty-five years, were donated to the CAC by Mr. Gilles Gagnon, MIRAC. Mr. Gagnon, an architect and friend of the late Mr. Webber, has kindly volunteered to help organize the material in the collection.

Moshe Safdie (1938-), architect, author, academic and one of McGill's most famous graduates, has recently signed an agreement with McGill which makes the University the sole depository for the Safdie collection. In February 1991, the CAC received the first in many shipments of the Safdie archive: sketchbooks, models, project files and correspondence relating to Habitat '67 and the National Gallery of Canada. (Notes and Comments, pp. 183-184.)

Alvaro Ortega (1920-), a pioneer in the field of low-cost housing and an educator, has donated his personal library, which consists of published material in English, Spanish and French on energy-efficient architecture, construction technology, and related topics. He has also donated project reports which he prepared as an advisor in low-cost housing for the United Nations.

The Blacker-Wood Library of Biology

The following major acquisitions have been made this year:

Grzimek's *encyclopedia of mammals* (2nd. ed., 5 vols.) New York, McGraw Hill, 1989.

Nardelli, Francesco. *The rhinoceros*. London, Basilisk, 1988.

Jones, Henry. *The wildfowl paintings of Henry Jones*. London, Harrap, 1987.

Robert, Leo Paul. *Les Oiseau de Chez Nous*. Neuchatel, 1929.

Hill, Robert. *Etchings of quadrupeds*. (9 vols, in 7) London, 1803-1816.

Department of Rare Books and Special Collections

Acquisitions by purchase:

Raymond Souster. *For What Time Slays*. Toronto: Contact Press, 1955. 1 of 25 copies printed.

Raymond Souster. *Walking Death*. Toronto: Contact Press, 1954. 1 of 25 copies printed.

Martin Grossman. *The Philosophy of Mesmerism*. Montreal: For the Author, 1844.

John Winthrop. *Relation of a Voyage from Boston to Newfoundland, For the Observation of the Transit of Venus*. Boston, 1761.

Ann McGarell. *Flora*. Mt. Horeb: Perishable Press, 1990.

Nicholas Monardes. *Joyful Newes Out of the New-found Worlde*. London, 1596.

A. P. Gasser. *Historiarum et chronicorum mundi*. Venice, 1533.

Fynes Morison. *An Itinerary Written by F. M.* London, 1617.

Chronicle

Acquisitions by purchase using funds provided by SSHRC Hume grant:

Joseph Priestly. *Letters to a Philosophical Unbeliever*. Bath, 1780.

David Hume. *A True Account of the Behavior and Conduct of Archibald Stewart*. London, 1758.

David Hume. *Oeuvres philosophiques*. Londres, 1788.

David Hume. *La vie de David Hume*. Londres, 1777.

David Hume. *The History of England*. London, 1778.

With a "Fleeting Opportunities" grant from SSHRC, we acquired a collection of 26 pamphlets and broadsides relating to the Douglas Controversy, with which Hume was embroiled in 1757. (Notes and Comments, pp. 181-183.)

Gifts:

Mr. Gordon Russell donated a collection of 2,665 items relating to temperance during the period from 1830-1910.

Dr. Lewis Pyenson donated some additional material for the Einstein Collection which he gave to the Department of Rare Books in 1988.

Mr. Lionel J. Emond donated several 17th and 18th century books of theology.

Mrs. Frances A. MacLennan donated a collection of literature formerly belonging to novelist Hugh MacLennan.

Mr. Jeffrey Dwyer donated a copy of the Pennyroyal Press edition of Lewis Carroll's *Through the Looking Glass*.

Bruce Whiteman donated his literary papers, including manuscripts, letters, research notes, etc.

Mrs. Judy Mappin donated a collection of Canadian poetry published by Contact Press in the 1950s and 1960s.

Mr. Harvey Shepherd donated a small collection of books that included a copy of *Double Persephone*, Margaret Atwood's first collection of poetry.

Quarry Press made a second donation of papers relating to the press's operations.

Dr. Lawrence Lande donated a fine collection of some 60 documents relating to whaling, 54 printed maps from the 17th, 18th and 19th centuries, all relating to North America, and some other prints and manuscript maps.

Education Library

The library received a gift of \$5,000 from the Education Undergraduate Society for the purchase of physical education materials.

We acquired numerous new titles in education generously donated to the library by professors of the Faculty of Education.

Islamic Studies Library

The Islamic Studies Library acquired the private collection of the German Indonesianist, Professor Otto Karow. Most of the items in this collection, rich in Indonesian literature, are covered in elegant batik. This acquisition was made through the Leiden booksellers E. J. Brill and funded by McGill Indonesia IAIN Development Project, itself financed by the Canadian International Development Agency (CIDA).

Chronicle

The McLennan-Redpath Libraries

A selective list of major purchases and gifts:

- Halifax Chronicle Herald, 1953-1973 252 reels (Imasco)
- Calgary Herald, 1954-1964 (Imasco)
- the Clarissa Project (Critical edition of Richardson's novel), acquired by funds from the Arts Library Development Fund
- Martin Luther King Jr. and the Civil Rights Movement. Carlson Publishers 1989, 18 v., acquired by funds from Soldiers' Memorial Fund
- Retrospective Purchases in East European History and Culture (SSHRC)
- John Van der Feyst's gift of 300 books on East Asia
- Professor Peter Hoffmann's gift of books on German history
- Dr. Hans Möller's gift of books on Scandinavian Languages and Literature
- CD-ROM bibliographic databases: PsychLit, ERIC
- American Immigration and Ethnicity, Garland, 1990, 20 v.
- Inventarii dei manoscritti della biblioteche d'Italia, 1890-1988, 104 v. (SSHRC)
- Archivio storico per le provincie Napoletane, 1876-90, 15 v. (SSHRC)
- Le monete della Repubblica fiorentina, 1984-1985. (SSHRC)

Other important gifts:

Nina Pletnev, widow of Rostislav Pletnev, donated some 250 titles on Russian language and literature.

Marina Swoboda, Admissions Officer at McGill and part-time lecturer in the Department of Russian and Slavic Studies, donated 236 titles on Russian language and literature stressing Old Russian literature.

Viktor Greppl, representing the Czechoslovakian Ministry of Culture, donated 630 recent Czech and Slovak imprints on the occasion of the Salon International du Livre in Montreal in November 1990. The majority of these books were popular in nature and as such not suitable to an academic collection and therefore sent on to the Multilingual Biblioservice of the National Library. However, the gift did include several valuable and important titles such as the *Etnografický atlas slovenska*.

Other important acquisitions:

- Danske Klassikere. A series of 23 volumes consisting of reprints of classic Danish fiction (in Danish).
- Holberg-Ordbog, vol. 1-5. A scholarly dictionary of the language of Ludvig Holberg, 18th century playwright, historian, and essayist; considered the "father" of Danish language and literature.
- Ludvig Holberg's *Værker*. The latest edition of Holberg's works in twelve volumes (in Danish). In addition, a number of other books about Ludvig Holberg were acquired.
- Heinrich Bach Collection. The private research library of an important scholar of German and Scandinavian linguistics. The late Professor Bach was attached to Aarhus University, Denmark. This rich collection contains books on German literature of the medieval to early modern period, German and Scandinavian, especially Danish, linguistics including dialectology, philosophy and fiction.
- Archivum Coronae Regni Bohemiae / Archiv Česke Koruny 1158-1526. A facsimile edition published by the National Archives of Czechoslovakia. When completed, it will consist of 17 folios of facsimiles, a set of slides and nine volumes of text. We now have two text volumes and three folios of facsimiles.

Chronicle

Law Library

A generous gift from the Class of '65 made it possible to acquire a CD-ROM workstation in this library, September 1990. The workstation consists of a cabinet, a Hewlett-Packard 386 microcomputer, Hitachi CD-ROM drive and the initial subscription to InfoTrac, the CD-ROM version of Current Law Index. It has proved to be an extremely useful and popular research tool.

Osler Library

Notable additions to this library include:

- Alpini, Prosper. *De medicina methodica libri tredecim ...* 2nd ed. Leyden: Boutesteiniana, 1719.
- Boerhaave, H. *Tractatus medico-practicus de lue aphrodisiaca continens huius affectionis historiam...* Venetiis: Novelli, 1765.
- Chirac, P. *Traité des fièvres malignes ...* Paris: J. Vincent, 1742.
- Grube, H. *Commentarius de modo simplicium medicamentorum ...* Copenhagen & Frankfort, 1669.
- Lampe, Heinrich. *Dissertatio historica juridica de honore, privilegii et iuribus singularibus medicorum ...* Groningae: Hajon Spandaw, 1736.
- Moles, Vincente. *De Morbis in Sacris Literis Pathologia*. Matriti: Joannis Sancii, 1642.
- Plocquet, Wilhelm Gottfried. *Commentarius medicus in processus criminales super homicidio, infanticidio et embryoctonia*. Argentorati: Amandi Koenig, 1787.
- Seidensticker, Peter. *Das Promptuarium Medicinae: ein schone arstedyge boeck van allerleye gebreck unnde pranckbeyden der mynschen*. Magdeburg: Bartholomaeus Ghotan, 1483.
- Tratado sobre os meyoys de preservacao da peste*. Lisbon, 1748.
- Trincavellius, Victor. *Echiridion medicum de cognoscendis curandisque tam externis, quam internis humani corporis morbis*. Basel, 1583.

University Archives

The University Archives received records of particular historical value from the Redpath Museum and Macdonald College. From the Redpath Museum came three registers and three catalogues documenting the development of its collections. Covering various periods between 1881 and 1946, these volumes record acquisitions and donations of specimens ranging from insects and mummies to fossils from Sir William Dawson and others.

From Macdonald College, through Helen Neilson, were acquired minutes, correspondence and photographs, mainly of the School of Household Science, ca. 1920-60, as well as papers relating to Neilson's book: *Macdonald College of McGill University, 1907-1988*.

Two organizations which assist McGill deposited correspondence and other records: the McGill Associates (covering the years 1938-76) and the Women Associates of McGill (1939-90).

The University Archives acquired the diaries for the years 1924-25 and 1939-89 of Montrealer Ethel Stevens Martin (1905-89).

From Mrs. J. D. Hopkins, the Archives received the records of the Snowdon Women's Club (1914-67); these complement the records of the Notre Dame de Grace Women's Club already in the Archives.

Chronicle

The Archives also added to its holdings of the records of McGill graduates. Margery Trenholme gave letters and diplomas of her family, including N. W. Trenholme (Law 1865); E. F. De Rosia gave a student scrapbook of Laurence De Rosia (1922-24); Althea Douglas deposited her student notes (English, Red & White Revue, 1940s); and Alexander M. C. Wright presented course notes of History lectures (1977-81). Megan Davies deposited records of the Association of Graduate History Students. These and numerous other records documenting McGill student life will be described in a thematic guide being prepared with the help of a grant from the financial assistance programme of the Archives nationales du Québec.

In the area of McGill staff papers, the University Archives acquired the papers of Theodore E. M. Newton (M. A. McGill 1927) who taught in the McGill English Department from 1937 to 1943. Newton spent most of the next twenty years in the diplomatic service; his later postings were as Canadian Ambassador to Indonesia and to Columbia and Ecuador. The papers (notes, drafts, correspondence) reflect Newton's lifelong interest in the life and times of Daniel Defoe. As a Travelling Fellow in England, 1931-35, Newton discovered new sources documenting Defoe's earlier years. After his retirement in the 1960s from public service, Newton resumed and completed his long-interrupted work on Defoe. The highlight of the papers is a lively typescript: "The early life of Daniel Defoe," which will be of interest to all students of the period.

From Mrs. Marika Asimakopulos, the University Archives acquired lecture notes, drafts of articles, and correspondence of Economics Professor Athanasios (Tom) Asimakopulos (1930-90). These papers document Tom Asimakopulos' teaching, research and correspondence with other economists, such as Joan Robinson, over the course of his McGill career (1959-90).

Former Professor of Sociology Aileen Ross gave the University Archives correspondence, photographs, and lectures and other papers (ca. 1940-80) documenting her career, including a short memoir.

Professor John Herd Thompson contributed correspondence relating to his teaching in the History Department, 1970-89, while additions were received to the professional papers of Henry Mintzberg, Professor of Management.

McCord Museum of Canadian History

As the McCord Museum enters the final phase of preparations for the reopening of the building in 1992, many new acquisitions were made this year strengthening the diverse collections. It appears that the expansion project has helped to raise the interest of collectors and donors: an increasing number are contributing to our collections with items of a very high value. A total of 1,247 artifacts were donated or purchased over the last year.

Among the most significant additions to the Archives collection are the archives from the Shawinigan Club, 1883-1915, as well as two journals donated by Mrs. A. M. West from Fort Simpson, Hudson's Bay Company. Also letters and printed ephemera from William McFarlane, an important businessman in Montreal in the 19th century, were donated by Mrs. Allison Rolland.

Some 82 items were acquired for the Costume and Textiles collection. Major acquisitions include a donation by Corby's Inc. of a large wall-tapestry designed and woven by the eminent Quebec weaver, Mariette Rousseau-Vermette, whose works are housed in a number of important American museums. A rare evening-dress of embroidered silk gauze dated around 1815 was acquired, as well as a notable men's dressing gown of about 1880 fashioned from one or more paisley shawls. As well, a curious, but beautiful grey sharkskin purse, ca. 1912, with a scalloped and engraved silver frame was added to the collection.

The Decorative Arts collection was enlarged by 110 items. Outstanding among the additions was the purchase at Sotheby's of a pedestal table with painted top, made in the Montreal region

Chronicle

in the early 1820s. A pair of maple and birch chairs made in Quebec in the early 19th century and previously published by Jean Palardy in *Early Furniture of French Canada* were donated. Within the toys collection, considered one of the best in Canada, several character dolls of superior quality were donated, and a complete miniature altar with all its accessories adds to the collection of toys for boys in early 20th century Quebec. A major addition to the Quebec folk art collection was the purchase of a 19th century miniature hearse with all its accoutrements.

Six objects were added to the Ethnology collection. Of particular note are the following: a whalebone mask-like sculpture made in the 1950s on St. Lawrence Island, Alaska; and a caribou-skin kayak built in a traditional way by William Koaha of Bathurst Inlet, ca. 1980, this latter being in an excellent condition and the only one in a Montreal museum.

The Notman Photographic Archives has seen 779 photographic documents added to its collection. Among the most significant additions were portraits, snapshot albums of rural Quebec and some framed photographs from the estate of Mrs. Helen Renouf. Mrs. Charlotte Millen has donated portraits made by Charles Aylette of Toronto and by Nakash of Montreal. A rare 8 x 10 folding camera was received from Mr. Mackenzie McMurray.

In the Paintings, Prints and Drawings collection, 231 items were added to the holdings during the year 1990-1991. These include four original Inuit drawings, one by Jessie Oonark titled "Inuit woman and child" and three by Pitseolak Ashoona. These are significant, since usually only prints by Inuit artists are acquired by southern collections. An oil on panel portrait of an Indian woman by Martin Somerville adds strength to our collection of mid-19th century artists working in Montreal. Two hundred original Aislin cartoons were added to the drawings collection, as part of an ongoing donation by Terry Mosher, which includes all the correspondence associated with the cartoons. The McCord Museum's collection of Canadian caricature is one of national significance comprising over 12,000 items spanning a period from the mid-18th century until the present. At a Sotheby auction the museum was also able to acquire the companion portrait of Mrs. James Ferrier which completes a set; the portrait of her husband, who was the first chancellor of McGill University, was already in the collection. (Notes and Comments, pp. 179-181.)

Redpath Museum

The following is a list of significant donations and acquisitions for 1990:

- | | |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethnology | – 2 prayer wheels, Nepal, 20th century, received from McGill's Faculty of Religious Studies |
| | – 1 palm leaf manuscript (prayer), Burma, 20th century, received from McGill's Faculty of Religious Studies. |
| | – 19 Indian coins, pre-Moghal to 20th century, transferred from McGill's Department of Rare Books and Special Collections. |
| Geology | – Received from the heirs of William Jarand: 132 cabachon stones, 120 mineral specimens and 47 cut, real and synthetic minerals from world-wide localities. |
| | – Received from Dr. Donald Doell: 6,000 minerals (various) from the Francon Quarry, Montreal, Quebec. |
| | – Received from Robert Belcher: titanite crystal from Minas Gerais Brazil, Stokesite from Urucam Mine, and Rose Quartz crystals from Galiles, Minas Gerais Brazil. |
| Herpetology | – 709 specimens of amphibians including: |
| | – 18 Tetraploid Green toads, <i>Bufo danatensis</i> , from Kirghizia USSR, donated by Leo J. Borkin (Zoological Institute, Leningrad), |

Chronicle

- 28 frogs, genus *Rana*, from Latvia and Leningrad, USSR, collected by D. M. Green and T. F. Sharbel,
 - 363 Whistling frogs, *Eleutherodactylus* spp., collected in the West Indies on the Islands of Barbuda, Bermuda, Dominca, Grenada, Guadeloupe, La Desirade, Marie-Galante, Martinique, Puerto Rico, St. Barthelemy, Tobago and Trinidad, plus Guyana and Venezuela in South America, by H. Kaiser, H. Gray and H. Schwarten,
 - 33 Spotted frogs, *Rana pretiosa* from Millard Co. and Wasatch Co. Utah, collected by P. Hovingh of Salt Lake City, Utah.
- Invertebrate Zoology – Deep water hexactinellid (glass sponge) collected by T. Rice in 1170-1200 metres of water, SW of Ireland and donated to the Redpath Museum by the Institute of Oceanographic Studies in Wormley, Surrey, England.
- Vertebrate Zoology – Skull of Elk (Wapiti) *Cervus canadensis* male, doanted by André Turcotte, St. Luc, Quebec.
- Whistling Swan *Olor columbianus* (died in captivity) from Steven Crutcher, Apple Hill, Ontario, via Professor Roger Titman, Macdonald College.
 - Cervical vertebrae of African Elephant *Loxodonta africana* (picked up in the bush in Kenya). Anonymous donation.
 - A Red Fox *Vulpes vulpes* and a Raccoon *Procyon lotor* (road kills) donated by Tim Sharbel.

Visual Arts Collection

The Visual Arts Collection received a portrait of Ethel Stark, C.M., L.L.D., painted by Herman Heinlich and donated by his widow, Ethel Stark, who studied at McGill and was the “first woman to found and conduct a professional symphony orchestra of international acclaim composed entirely of women—the Montreal Women’s Symphony Orchestra. This was the first Canadian orchestra to play at Carnegie Hall in New York.” The portrait is hanging in the lobby at Pollack Hall.

Cataloguing

Any major research library has a backlog of cataloguing to cope with. While it is a high priority to add to the collections and continue to enrich them with quality material, there is never enough time or staff to sort, organize and catalogue everything. Recently, the Libraries were most gratified to accept a donation which allows us to catalogue one of our most rare and beautiful collections, the Joe Fishstein Collection of Yiddish Poetry. This donation came from the Jewish Community Foundation of Greater Montreal. As a result, scholars and researchers will soon be able to have access to this unique collection of some 3,000 volumes of Yiddish poetry.

Library Publications

Fontanus: From the collections of McGill University, vol. III, Montreal 1990.

Osler Library Studies in the History of Medicine: McGill Medical Luminaries, by Edward H. Bensley, Montreal, 1990.

John S. Archibald and His Associates: Guide to the Archive. Irena Murray, general editor. Canadian Architecture Collection, Blackader-Lauterman Library of Architecture and Art, Montreal, 1990.

Chronicle

What was thus by Chance Begun: The Napoleon Collection of McGill University; Selected Prints and Illustrated Books. Edited by Carol Solomon-Kiefer. Montreal, 1991.

Fontanus Monograph Series I: Arabic Manuscripts in the libraries of McGill University, Union Catalogue. Adam Gacek, Montreal 1991.

Contributors

Montague Cohen was born in London, England and obtained his B.Sc. (Physics) and Ph.D. (Medical Physics) from London University. Before coming to Canada in 1975, he worked at the London Hospital in London and the International Atomic Energy Agency in Vienna. He was appointed Director of McGill's Medical Physics Unit in 1979 and has cross-appointments in Physics and Radiology. He is also Honorary Curator of the Rutherford Museum. He has been a member and/or chairman of several task groups of the International Commission on Radiological Units and Measurements, and a consultant on radiation safety to the Ontario Government.

M. J. Dunbar, born in Edinburgh, Scotland, is a graduate of Oxford University (M.A.) and McGill University (Ph.D.). After holding a Henry Fellowship at Yale University, 1937-38, he came to the Department of Zoology at McGill in 1939. He was appointed Canadian Acting Consul to Greenland, 1941-46, and joined the McGill Faculty in 1946, Department of Zoology. He served as first Director of the Marine Sciences Centre (1963) and is now Professor Emeritus of Oceanography in the Department of Meteorology, as a member of the Centre for Climate and Global Change Research.

Dionysios Hatzopoulos holds a Ph.D. in Byzantine History from the Université de Montréal (1980); has studied Latin Palaeography at the Institut dominicain d'études médiévales in Montreal and currently teaches Greek Civilization in the Department of Languages, Faculté des arts et des sciences, at the Université de Montréal, as well as Greek and Roman History at Dawson College in Montreal.

Adam Gacek, a native of Poland, received his M.A. in Oriental Philology from the Jagiellonian University, Cracow, and subsequently a post-graduate diploma in Library Science from the Polytechnic of North London. He worked at the School of Oriental and African Studies, University of London, and the Institute of Ismaili Studies, London, and is the author of two catalogues of Arabic manuscripts for the above institutions. He is also the author of a growing number of articles on Arabic palaeography and codicology and is a co-editor of a unique annual publication, *Manuscripts of the Middle East*. In 1987 he joined McGill University, where he occupies the position of Head Librarian of the Islamic Studies Library. Since then he has contributed to two previous issues of *Fontanus* and has recently published *Arabic Manuscripts in the Libraries of McGill University, Union Catalogue*, the first volume in the new serial publication *Fontanus Monograph Series*.

John Hobbins obtained his B.A. (Hons. History, 1966) and his M.L.S. (1968) from McGill University. Since then he has worked for the McGill University Libraries as Reference Librarian, Instructional Services Librarian, Head of Interlibrary Loan, Head of Acquisitions, Central Technical Services, and Acting Law Area Librarian. He is currently Associate Director of Libraries with a special responsibility for Systems and Technical Services. He is a former contributor to *Fontanus*, including one article based on the Humphrey papers.

Barbara Lawson is Curator of Ethnology at the Redpath Museum. She has a B.A. in anthropology from Northwestern University and an M.A. from McGill. Prior to joining the Redpath Museum in 1984, she was a member of the curatorial staff at the Vancouver Museum. She has recently completed a study of artifact collecting and its relation to cultural representation, which will be published as the second volume in the *Fontanus Monograph Series*. This work provides the first comprehensive account of the history of the Redpath's ethnological holdings and a detailed analysis of a collection of objects gathered during the nineteenth century by a member of Nova Scotia's Presbyterian "South Sea Mission."

Irena Žantovský Murray is a native of Prague, where, from 1963-1968, she studied philology at Charles University. She received her M.L.S. degree from the University of Western Ontario in 1970, and her M.Arch. (History and Theory) degree from McGill University in 1991. From 1971 to 1973, she worked as a bibliographer for the National Library of Canada. At McGill, she has held different positions both in the library system, and as lecturer. Since 1981, she has held the position of Head Librarian in the Blackader-Lauterman Library of Architecture and Art. She is a member of the joint Institute for Research in Architectural History (IRHA), and has recently acted as guest curator for the Canadian Centre for Architecture.

Franziska E. Shlosser is associate professor, Department of History, Concordia University, Montreal. She holds an M.A. in classics and a Ph.D. in history (with distinction) from McGill University. She wrote volumes two and three of the catalogue of *The McGill University Collection of Greek and Roman coins* (edited by Michael Woloch) and has published articles on Roman and Byzantine history.

Richard Virr is Curator of Manuscripts, Department of Rare Books and Special Collections, McGill University Libraries and Associate Editor of *Fontanus*. He is also Archivist of the (Anglican) Diocese of Montreal and of the Ecclesiastical Province of Canada. He holds a doctorate in church history from McGill University. He teaches an introductory course on codicology and descriptive bibliography, has published regularly in *Fontanus*, and has a special interest in the history of collections and libraries.

G. Michael Woloch has been at McGill since 1961, when he joined the Classics Department as a Lecturer. He received his Ph.D. degree in classics from the Johns Hopkins University in 1966, and in 1964 he held a Summer Fellowship at the American Numismatic Society in New York City. He has been John MacNaughton Professor of Classics since 1988. He was editor of *The McGill University Collection of Greek and Roman Coins*, 3 volumes (1975-1984).

Guidelines for Authors

Fontanus is an annual publication devoted to scholarly research based principally upon McGill University collections. The term 'collections' is interpreted in the broadest sense, to include books, archives, specimens, artifacts, buildings and other forms of documentary evidence. Contributions derived from all aspects of McGill collections will be considered. Submission of a contribution is understood to imply that no paper containing essentially the same material has been published previously and that the manuscript is not under editorial consideration elsewhere. All submissions will be reviewed by members of the Editorial Board and refereed by experts in the appropriate field. Any substantial changes will be cleared with the author before publication. Send submissions, prepared according to the instructions below, to:

Dr. Hans Möller
Editor
FONTANUS
McLennan Library Building
3459 McTavish Montreal, Quebec H3A 1Y1

Form of Manuscript

All manuscripts (in two copies) must be typewritten and double-spaced. Articles may also be submitted on computer disk, using Wordperfect 4.2 or 5.0 software. Notes should be numbered consecutively and follow the text of the article. Author's name should appear after the title and before the text of the article. A short biographical note of no more than 100 words should be included. Degrees, current and previous positions and major publications should be listed.

Abstracts

A brief abstract (of no more than 200 words) of the content of the article should be prepared by the author.

Form of Citation

Manuscripts should conform to the standards outlined in *The Canadian Style: a guide to writing and editing* (by the Department of the Secretary of State of Canada) Toronto, London: Dundurn, 1985. Translation of passages in other than French or English should be provided in the text.

Illustrations

Photocopies of all visual material (with brief captions) must be submitted for initial evaluation. Once an article has been accepted, the author is responsible for supplying clear black and white glossy photos and for securing the permission to publish copyright material is necessary.

Fontanus is published in the early part of each calendar year. Articles submitted before September 15 are eligible for consideration for the following year's issue. Authors will have the opportunity to review their manuscripts after editing has been completed.

