



Kenneth O. May, 1939, in Berkeley, California. Taken in the garden of Professor Dudley McGovney. (Courtesy of Ruth McGovney Kaspin.)

Kenneth O. May, 1915-1977

His Early Life to 1946

CHARLES V. JONES* AND PHILIP C. ENROST†

*Department of Mathematical Sciences, Ball State University, Muncie, Indiana 47304 and
 †Institute for the History and Philosophy of Science and Technology, University of Toronto,
 Toronto, Ontario M5S 1K7, Canada

AND

HENRY S. TROP

Department of Mathematics, Humboldt State University, Arcata, California 95521

Kenneth Owsnsworth May graduated from the University of California at Berkeley in 1936 with highest honors in mathematics. The following year he received his Masters degree and became a fellow of the Institute of Current World Affairs, and during the next two years he traveled to England, Europe, and Russia. On his return to the United States he became active in the Communist Party, the consequences of which would plague him for years. He joined the United States Army in 1942, serving with distinction, and after the war returned to Berkeley, where he obtained his Ph.D. in 1946. He immediately accepted an assistant professorship at Carleton College in Northfield, Minnesota, later moving to the University of Toronto.

This part of May's biography focuses on the events up to his accepting a position at Carleton College. In this early phase his openness, his emphasis on good communications in the process of education, and his interest in practical procedures emerge which later set the background for his successful career as a leading historian of mathematics and the founding editor of *Historia Mathematica*. © 1984 Academic Press, Inc.

Kenneth Owsnsworth May legte die Abschlussprüfung an der Universität von Californien in Berkeley 1936 mit höchsten Auszeichnungen ab. Im darauf folgenden Jahr erhielt er seinen Masters degree, wurde Mitglied am Institute of Current World Affairs und reiste in den folgenden beiden Jahren nach England, Europa und Rußland. Gleich nach seiner Rückkehr in die Vereinigten Staaten betätigte er sich aktiv in der Kommunistischen Partei. Die sich daraus ergebenden Konsequenzen sollten ihn noch Jahre verfolgen. 1942 trat er in die Armee der Vereinigten Staaten ein, in der er mit Auszeichnung diente. Nach Kriegsende ging er zurück nach Berkeley und erwarb 1946 den Doktorgrad. Gleich darauf nahm er eine Assistentenprofessur am Carleton College in Northfield, Minnesota, an. Später ging er an die Universität zu Toronto.

Dieser Teil von May's Biographie konzentriert sich auf die Ereignisse bis zur Annahme einer Stellung am Carleton College. In dieser frühen Lebensphase zeigen sich bereits Charaktereigenschaften wie seine Offenheit, seine Betonung guter Beziehungen im Erziehungsprozess und seine Vorliebe für unbürokratisches Verhalten, die später zu seiner erfolgreichen Karriere als führender Mathematikhistoriker und Gründungsherausgeber der *Historia Mathematica* beitragen. © 1984 Academic Press, Inc.

En 1936, Kenneth Owsnsworth May termine, avec les plus hautes mentions, ses études de premier cycle en mathématiques à l'Université de Californie à Berkeley. L'année suivante,

il reçoit sa maîtrise, devient "fellow" de l'*Institute of Current Affairs* et, au cours des deux années subséquentes, parcourt l'Angleterre, l'Europe et la Russie. A son retour au Etats-Unis, il devient membre actif du parti communiste, ce dont il devra supporter les conséquences durant plusieurs années. Il s'engage dans l'armée américaine en 1942, servant avec distinction, et retourne à Berkeley après la fin de la guerre pour obtenir son Ph.D. en 1946. Il accepte alors un poste d'assistant professor au Collège Carleton à Northfield, Minnesota. Plus tard, il se déplacera à l'Université de Toronto.

Cette première partie de la biographie de K. O. May se concentre sur les événements ayant précédé l'acceptation de son poste au Collège Carleton. Au cours de cette première période se développe son ouverture d'esprit, son souci d'une bonne communication dans la réalisation d'actes éducatifs, son intérêt pour la pratique. Ainsi se tisse la toile de fond sur laquelle prendra forme une carrière comme historien des mathématiques renommé et éditeur fondateur de *Historia Mathematica*. © 1984 Academic Press, Inc.

INTRODUCTION

Kenneth Ownsworth May (July 8, 1915, to December 1, 1977) is best known to readers of this Journal as a historian of mathematics, although he pursued a number of other interests during his lifetime. At the time of his death in Toronto, he was in the midst of completing a major project—a dictionary of mathematics. Throughout the previous decade he was deeply involved in improving the dissemination of information concerning the history of mathematics, a task he considered of fundamental importance to its acquiring the status of a discipline. *Historia Mathematica* was not only a natural outgrowth of his interests and activities, but in many respects was their capstone.

May began his career as a mathematician specializing in mathematical economics, and as a socialist. He studied mathematics and economics as an undergraduate and graduate student, and he was active in the Communist Party from his undergraduate years until 1942 [1]. Throughout his career he had a commitment to teaching, first of students and soldiers, and later of a whole generation of historians. These didactical interests were reinforced by his political commitments, so it is of interest to see how deeply he was involved in the politics of socialism.

EARLY EDUCATION AND FAMILY

Kenneth May reports his education as beginning in the Music Education School of Portland, Oregon [2]. After the family moved to Berkeley, he attended The Williams School, Cragmont School, Garfield Junior High School, and Berkeley High School. He spent much time studying Whitehead and Russell's *Principia Mathematica* and decided to major in mathematics when he entered the University of California at Berkeley [3]. He was also a good athlete and, during his high school years, he acquired an official California junior ranking in tennis. When he entered university, he did not try out for the tennis team, but instead played on the varsity soccer team [4].

In his freshman year, Kenneth won one of seven Kraft Prizes which recognized his academic work as being among the best in a class of around 3000. He was

elect to Phi Beta Kappa in his junior year, and generally was regarded by his fellow students as of exceptional ability [5].

While an undergraduate, Kenneth attracted the attention of Professor Griffith C. Evans of the mathematics department. Evans considered him to have outstanding mathematical talent and expressed greater confidence in him than in more advanced students. At the time Kenneth completed his undergraduate studies, he had an interest in the mathematical basis of statistics and the use of statistics as an element in national planning—an area close to Evans' own research interests. Kenneth took a course in the history of economics, but not in the history of mathematics—apparently no course was offered. But he was diverted from taking his Ph.D. immediately by an unusual opportunity to study national planning in the Soviet Union.

Kenneth's interest in national planning was probably in part a result of his father's influence. Samuel Chester May (1887-1955) was born in Portland, Oregon, where his grandfather had moved from California. Samuel's father was Jewish, although no religious or cultural traditions were observed [6]. Kenneth reported that his father was a member of the Unitarian Church [7]. Sam May studied at the University of Oregon, attended Yale Law School from 1908 to 1910, receiving his LL.B. in 1912, and from 1913 to 1917 practiced law in Portland. He married Eleanor Owsnorth Parkin in 1913, and Kenneth, the second of two sons, was born two years later. Sam May served as a First Lieutenant in the U.S. Army during World War I and after the war attended Columbia University, receiving his M.A. in 1920. He was an instructor in the political science department at Dartmouth College from 1920 to 1921 and then joined the department of political science at the University of California, Berkeley. In 1930, the year he became Professor, he established the Bureau of Public Administration and directed it until his retirement from the university.

Sam May was very pragmatic; political science for him meant implementation of practical reforms at the local level of government [8]. Good public administration at this level would have included city planning, a feature of Sam May's thinking traceable to his sympathies for Herbert Hoover's engineering approach to problems of government. This had a special appeal to Kenneth. That his father did exercise some influence on his thinking during this era of Republican Progressivism is perhaps more dramatically shown by Kenneth's supporting the Republican candidate for the Presidency (Herbert Hoover) as late as 1932 [9].

During Sam May's tenure at Berkeley he counted among his students Earl Warren, later to be a Republican governor of California and then Chief Justice of the United States, and William F. Knowland, later a Republican U.S. senator from California. He had valuable contacts and served on a variety of commissions at home and abroad. He was also a member of several important clubs including the Sierra Club and the Bohemian Club. He was nationally recognized for his leadership in developing university training programs for the public service and, on his retirement from the Berkeley faculty, he received a commendation from the California Legislature for his services. Soon after retirement he died in the Staler

Hotel in New York City, en route to Bologna to help establish a program in public administration at that university.

It is not unusual for men of such accomplishment to alienate people in their climb to the top, and Sam May drew his share of antipathy and rancor from men in and out of academe. Walter Rogers of the Institute of Current World Affairs (ICWA) characterized him as "the scheming, wire-pulling type of an academic official . . . pretty good at wangling appropriations out of the legislature," and capable of sacrificing family ties for personal ambition [10]. Differences of an unknown nature developed between May and a fellow member of the Berkeley faculty, the distinguished professor of law, Dudley McGovney [11]. May was reported to have disliked McGovney, and McGovney is reported to have considered May a fool [12]. This relationship is of interest because McGovney's daughter, Ruth, a school teacher in the Oakland, California, school system and six years' Kenneth's senior, was later to become his wife.

Kenneth's mother, Eleanor Ownsworth Parkin May, in sharp contrast to his father, was by all accounts a gracious and lovely lady. Born in England and of striking beauty and refined tastes, she had the reputation of being one of the finest and most attractive women about the university [13]. Although she was an Episcopalian [14], she was attracted to the beliefs of Christian Science, and Kenneth's early interest in mathematics may have owed something to her feeling that a very subtle science was essential for understanding the world. This might account for his acquiring Whitehead and Russell's *Principia* while in high school, and at the same time entertaining a theory that the future of the world was traced on the walls of the Egyptian pyramids, to be revealed to those who could read them. She may also have influenced Kenneth to become involved in the Institute of Pacific Relations, an organization which promoted peaceful ties among the nations of the Pacific rim (he served the student-affiliated organization as Secretary in 1933). At least she provided transportation for him and his friends to a 1933 conference of the IPR [15].

Mrs. May died as the result of a gas heater explosion in 1935—while Kenneth was a junior in college. Her death had a profound impact on him, not the least because he was at home at the time of the explosion and found her dying [16]. In 1940, Samuel married Bernice Hubbard, who survived him by nearly twenty years.

Kenneth earned his A.B. degree with highest honors in mathematics in 1936. He took courses in mathematics, science, economics, German, and Italian. Early in his undergraduate years, his political orientation changed and at some point he joined the Communist Party. Two events recalled by one of his closest friends are worth noting. First, Kenneth was active in changing the discriminatory policies of the barber shop of the Stephens Union on campus; this barber shop had refused to cut the hair of black students. Second, he helped to found the "Open Forum," which promoted public discussions of controversial issues. As a result of these and similar activities, Kenneth was elected to the Order of the Golden Bear, a senior honorary society which included campus leaders such as the editor of the daily paper and the president of the student body [17].

He
and p
of ex
ics p
Affai
fellow
and r
his lit
by th

In
week
was c
once
end c
humo
Galo
matic

It
C
ir
a
e

The
only
had

K
day
thro
1939
rema
ing,

about
the s
to d

Th
by t
ness
ICW
tion
beca

In
two

He earned his Master's degree in 1937 with courses in mathematics, economics, and physics [18]. During this year of study, he had been identified as a young man of exceptional promise and, partly through the recommendation of his mathematics professor, G. C. Evans, was recruited into the Institute of Current World Affairs (ICWA) in June. He received his father's approval to accept an ICWA fellowship, thereby setting in motion events which led three years later to a great and much publicized conflict between them. To prepare for this new direction in his life, Kenneth enrolled in a Russian seminar during the summer of 1937 offered by the University of California and the Institute of Pacific Relations.

In order to complete the formal requirements for his doctorate, he took two weeks in August to prepare for the preliminary examination, and on August 26 was examined on his report, "Galois Theory of Equations." He was passed, he once reflected, "possibly because the committee was too bored and sleepy at the end of my talk to make any objections"—a comment typical of his self-effacing humor. In his presentation May commented on the historical events surrounding Galois' life, providing what seems to be his earliest effort in the history of mathematics.

It is most interesting to compare the original work of Galois with the modern presentation. Considerable formalization and simplification have occurred, but the ideas are all contained in the fragmentary works of this young Frenchman killed in a duel at the age of 21 in 1832. It almost makes one cry to think that his contemporaries rejected his work and rebuffed him at every turn. [19]

The examination completed the formal requirements for his doctorate, leaving only the submission of a thesis at some later date to obtain the degree, as Evans had advised him. This he did nine years later.

ICWA FELLOWSHIP

Kenneth took up his duties with the Institute of Current World Affairs on the day following his examination. ICWA had been established and supported through trust funds provided by the Chicago industrialist, Charles R. Crane (1858-1939), along with his son, John O. Crane (1899-1982) [20]. Its objective was (and remains) "to identify areas or issues of the world in need of indepth understanding, and then to select young persons of outstanding character to study and write about those areas or issues." May was brought into the organization to study how the sciences and technologies in Soviet Russia were financed and organized, and to determine "their economic, political and social significance" [21].

The process of selecting ICWA fellows was an informal affair, usually initiated by the Director, Walter S. Rogers, asking his contacts in the universities, business, and government if they knew of any young people who might fit into the ICWA mandate and programs. May was probably first brought to Rogers' attention by Evans, partly because of the high opinion Evans held of May, and partly because May's interests were closely allied to those of ICWA.

In the late 1930s, the Institute of Current World Affairs regarded the link between science and society as a basic problem in need of study. ICWA was then

primarily interested in producing international specialists and generalists who had been immersed for a period of time in world affairs. While in Moscow in 1936, Rogers had met with the Director of the Institute of the Central Administration of National Economy and thought he had concluded an agreement with him to accept American students. The Russian Institute was particularly interesting because it focused on the study of the mathematical theory of probability and statistics and its utilization in social planning. These interests were almost a perfect match to those of ICWA, which by then had adopted a program to study national planning in the U.S.S.R.

Kenneth, now in his early twenties, was the kind of young person Rogers wanted: capable, intelligent, "a brilliant mathematician" (as Evans described him), with specific interests in statistics and planning. Kenneth had hoped to obtain his Ph.D. at Berkeley and then to go wherever he could get the best training in statistics. But Rogers outlined a fellowship offer which changed his plans because it matched his own objectives so well: "The proposal you outlined would enable me to carry on just the studies I wish in statistics and economic planning and to do so in close contact with practical work" [22].

ENGLAND AND RUSSIA

Enrolling Americans as students in Russia as Rogers had envisioned never came to pass, but May did visit Russia as a tourist on two occasions. His initial visit came immediately, but his itinerary took him first to Chicago, next to some installations of the Tennessee Valley Authority, then to Washington, D.C., New York, and Montréal; he met and talked to people associated with ICWA at each stop. On September 18, 1937, he set sail for England.

On arriving in London he immediately set about establishing contacts and, with characteristic enthusiasm, adopted a plan of action. He investigated Cambridge, Oxford, and the University of London, weighing relative strengths in Russian studies, mathematics, and the general quality of life in college residence. He decided on London because of the strength and breadth of Russian studies in the School of Slavonic and East European Studies and the London School of Economics (L.S.E.), and because of two departments in University College: Eugenics headed by R. A. Fisher and Statistics headed by E. S. Pearson. He was also attracted by certain courses offered in the L.S.E.: F. A. von Hayek's "Problems of a Collectivist Society," E. F. M. Durbin's "Economic Planning in Theory and Practice," and courses on mathematical economics and statistical methods offered by E. C. Rhodes, R. G. D. Allen, and L. Robbins.

Originally, the idea of studying in London was only tentative, because May hoped that upon arriving in the Soviet Union he would be able to stay on as a student. But during the past summer word had come to ICWA that neither May nor Howard Wiedemann, another new Fellow recruited for the Russian studies project, was to be granted student status. Conditions in Russia were unsettled at this time, foreigners were not in favor, and students were simply undesirable [23]. Hope remained that if war did not break out, it would still be possible in the near

future to arrange for May and Wiedemann to remain in Russia as students; in the meantime, they were told to adopt alternative plans.

Consequently, May laid down his objectives for an academic year in London: first and foremost, to gain facility with the Russian language through courses at the School of Slavonic Studies; second, to read in statistics at University College; third, to read in areas of general planning and in Marxism and to attend lectures at L.S.E.; fourth, to do general reading, enjoy the theatre, and get to know London and parts of England. As he put it, "... I am anxious to live in a big city, away from the academic atmosphere which I have been breathing these last few years"

[24].

May left London for Russia as a tourist in early October, traveling via Stockholm to Leningrad for a three-day stay and then on to Moscow, arriving about October 15. He was denied contact with anyone in the Russian National Planning Commission. He found that the courses being offered at the Institute of the Central Administration of National Accounting were not sufficiently advanced to warrant his time, even had he been able to gain admission. So, he instead made good use of the opportunity to see what he could on his own. He commented on daily life as he observed it, including a joke he reported going around about a passenger on the crowded subway begging to be let off at the next stop since it was the fifth time he had gone past it! Bookstores impressed him with their incredibly low prices and great variety:

Although unable to see the people in planning, there was nothing to prevent buying the books and periodicals in the field. Hence, I scoured the bookstores and shipped out bundle after bundle to England. This collection alone will be worth the trip. [25]

Indeed, these books were to serve him well during the next couple of years. He left Moscow on November 8 for the return trip to London. Back in London, he immediately began the program previously arranged, spending a good deal of his time studying Russian, mostly by reading, acquiring greater skill at this than at speaking. He also linked up with the group at the L.S.E. centered around R. A. Fisher and spent his time getting acquainted with statistical sources and methods rather than attending lectures. In his study of general planning and Marxism he took some courses at the L.S.E. in addition to reading Marx' *Capital* and periodicals on political and economic planning. By April he was able to report that he had pretty well accomplished his goals as set forth the previous fall.

During this time further efforts to obtain permission for May and Wiedemann to enter Russia as students had failed and the prospects were becoming increasingly dim. In late spring, Rogers traveled to London and discussed at length Kenneth's future work for ICWA. Studying in Russia in the immediate future was out of the question so Rogers suggested that instead he do a long-term comparative study of planning. For personal reasons, which are not divulged in his correspondence with Walter Rogers, May did not adopt this course. Meanwhile during this early part of 1938, May and Wiedemann had been introduced into a group of people around J. D. Bernal. Wiedemann had an interest in

near [23].
ed at
ides
May
as a
May
s of-
and
lems
also
enics
Eco-
the
He
ssian
idge,
with
each
New
some
nitial
never
ning
ould
plans
ining
ed to
ribed
ogers
onal
rfect
tatis-
g be-
m to
on of
1936,
had

both the history and philosophy of science, and Bernal was known at that time for his Science and Society studies. May formed a high opinion of Bernal, referring to him as "one of *the* minds roaming the tortured earth" [26]. He saw Bernal many times and followed his work thereafter. It is easy to imagine that encounters occurred in which their conversations turned to history, although none is reported by May in any correspondence known at present.

NEW DIRECTION AND MARRIAGE

The previous December (1937) the American Embassy had made inquiries to ICWA about Kenneth, prompted by his having introduced himself at the Embassy in London—then a normal procedure for travelers. During the late spring of 1938, Kenneth was given an assignment by the isolationist United States Ambassador to Great Britain, Joseph P. Kennedy. He was to travel throughout England observing the social, economic, and political conditions, and to investigate English opinion and generally grasp the English situation. (Specifically he observed some by-elections.) Kennedy's aims are not reported by Kenneth (he likely did not know them) but Kennedy's well-documented later opposition to the American entrance into the Second World War may have figured in his motives [27].

As the summer progressed, Kenneth revealed in a letter to Rogers a feeling of restlessness with his indefinite situation and his desire to search out a clearer course for the coming year.

The most important thing which emerges is that next year must be one of concentration for me, as opposed to this last year of extensive dabbling. I consider the latter valuable, but now it is time to choose one project and carry it through—whether it be some definite task in Russian or planning, the continuance of my mathematical training in some specific way, or some definite work for the Ambassador [Kennedy]. Furthermore, this work should be so organized that I know what I am accomplishing and why, and have some idea of where it is leading. . . . The fact of definiteness, not the locale, is the important thing. [28]

Kenneth was twenty-three and wanted to finish his Ph.D.; in order to do this through the University of California ("certainly the easiest and quickest way"), he needed to do more work in mathematics. Evans had suggested that he might study in Paris, and he already knew that there was considerable interest in France concerning issues of science and society. In light of the impossibility of studying in Russia as originally planned, going to Paris seemed the most advantageous plan.

This same letter with its tone of restlessness also announced to Rogers that he had decided to marry, and the curiously cold and analytic approach of this letter suggests that May was defensive and feeling the need to justify his decision:

. . . I have decided to marry this summer. The decision rests on the conviction that, whereas marriage in general may be harmful to young men or to young men's careers in general, this particular marriage will be helpful as well as happy. Specifically, I shall be able to do better work for the Institute and develop more healthily. The more active and mobile my work requires me to be, the more necessary does it become for me to have this source of continual stability and practical help. . . . I am confident that a year would show that the help she could render me would be worth the supplementary expense. . . . [29]

On July 25, 1938, May married Ruth McGovney (in St. Pancras Town Hall, London) in opposition to his father's advice, which was offered in a most dramatic fashion. Sam May felt so strongly against his son's marriage that he traveled from Berkeley to London in a futile effort to stop him—a fact which Rogers reported directly to Ambassador Kennedy [30].

There is no question about the significance of the decisions which this letter reveals. Kenneth rejected the suggestion that he do a comparative study of planning for ICWA. Moreover, the ICWA fellowship rules at that time forbade the fellows to marry but Kenneth rejected all advice against marriage, even that of his father offered in such dramatic fashion [31].

Kenneth in fact had made a strong appeal to ICWA to change the mutual agreement which they had and to allow him to continue his formal training in mathematics, supporting both himself and his wife, in spite of the fact that the ICWA fellowship had never been intended for formal education [32]. When Rogers responded, he stated that he was "taking the situation that has developed as a whole" into account and was forced to conclude "that you have placed yourself outside the range of the Institute's interests," and asked for Kenneth's resignation. Kenneth responded only to the issue of his marriage, "I am sorry that you feel that my marriage has placed me outside the range of the Institute's interests" [33].

It would seem that marriage loomed so large in Kenneth's mind that it obscured the other decisions he had taken—a somewhat skewed perspective perhaps exacerbated by his father's meddling. In fact there were other forces operating which Kenneth was not revealing, and which were anything but cold and analytic as his letter to Rogers might suggest. When Ruth McGovney arrived in England she found Kenneth in a very low state of morale due to events in his personal life. Among the most traumatic must have been a close relationship he had established with a young lady who suddenly died while Kenneth was away on a skiing trip in France [34]. He had had some other disturbing personal relationships, all of which had combined to leave him in a weakened emotional state.

Meanwhile, he had become uneasy about the Institute for Current World Affairs (he was unsure of the purposes of the Institute, of why it was training people in Russian affairs), and had begun worrying whether his credibility in the Communist Party might be compromised as a result of his ICWA fellowship. But he would have continued with the fellowship and study in Russia, had it been possible. Since that option was closed to him, he was in fact ready to return to the United States and to work full time for the Communist Party, forsaking further formal education and his connections with ICWA. Miss McGovney convinced him to remain in Europe for the duration of her year of academic leave, studying at the Sorbonne where she would be during most of the ensuing year. They would then return and Kenneth could take up his doctoral program in mathematics. This was the plan agreed upon [35].

Kenneth resigned his ICWA fellowship, at the request of Rogers, while maintaining very cordial relations with the Institute—many years later he would serve

on its board as a governor [36]. Through the succeeding years he developed a deepening relationship with Walter Rogers, which more than once was to serve him well.

PARIS AND RUSSIA

During the winter of 1938–1939 Ruth and Kenneth May lived in Paris, studying at the Sorbonne and attending classes of the Workers' University at night [37]. Kenneth concentrated his efforts on statistics and probability but maintained an active interest in the interactions of science and society. Meanwhile, his interests in economics shifted from problems of wages and distribution of income more generally, to the organization of science. In the context of the relationship between planning and the issues of science and society, this raised problems about invention and technical progress, which in turn led him to observe that if science were broadly interpreted, "then planning may be considered as a certain type of scientific activity, as the scientific method applied to human action in different spheres . . . [that is] 'Planning' as the conscious application of science to human society." This led him to formulate a kind of research program:

. . . Bernal's book [*The Social Function of Science*, 1939] interested me because of his efforts to come at economic problems from the point of view of human needs and productive possibilities, rather than from the superficial phenomena of the market. Of course, he had to do this since he is not an "economist." The more economic theory I read the more I become convinced that its scrapping is the first condition for any understanding of our problems. At the same time, I think that more mathematics, not less, is what is needed. In my opinion, the strongest causal (and other) linkages in the Science and Society complex run thru the Technology \Rightarrow Economics link, and it is here that I am searching for some mathematical formulation. Some of the up to now "useless" mathematical theories are going to be quite handy, although the affair is not to the paper stage as yet.

Apparently Bernal continued to exercise some influence on Kenneth's thinking, but perhaps the more interesting feature of this statement concerns his research. Basically he has adumbrated the general topic of his doctoral thesis completed seven years later. In fact, only a few months after the above statement was written, he had begun preliminary work on what he expected to develop into his Ph.D. thesis. Moreover, as he put it, "to add a realistic touch in keeping with the world situation, I plan to delve into the applications of Probability to Ballistics."

The frequency of letters between May and Rogers diminished considerably in 1939. Ruth May traveled to Italy to study in the spring and Kenneth visited her at Easter. During the summer they visited the Soviet Union, traveling by train through Berlin, Warsaw, Kiev, to Moscow (for about a week), and then on to Leningrad and out of Russia through Finland. While in the Soviet Union, Kenneth made contact with theorists at the Kharkov Engineering–Economic Institute, about whom he had learned from his professors at the Sorbonne. He was impressed by the Soviets' efforts to train what he called the "engineer–economist," "well grounded in the sciences both physical and social, and equipped with the intellectual and manual skills of industry." These were of special interest to him, since they represented "a step toward the abolition of the distinction between

intellectual and manual labor" [39]. While in Khar'kov, Kiev, and Moscow, they contacted the universities and talked to people there. They also made contact with another ICWA fellow, J. N. Hazard, who went with them for a visit to a collective farm [40].

The return to England took the Mays touring through Sweden and Denmark. They reached London and very shortly returned to the United States. They arrived in New York for a stay of about two weeks, during which Kenneth spent a weekend visiting with Walter Rogers [41]. They then returned to the Berkeley area, Kenneth to the campus of the University of California with the intent of completing his doctoral program and Ruth to her teaching position in Oakland. He was appointed as a teaching assistant and was assigned to a course in the mathematics of finance and a course in analytic geometry and calculus. His interests since the previous summer (when he had announced his plans to marry) had focused very much on mathematics and economics; finishing his Ph.D. was a high priority.

Kenneth and Ruth May indulged their passion for hiking in the Sierras. During one camping trip, a mother bear snatched their backpacks which had been left prepared for the next day's hike. Kenneth chased her, yelling and banging pans, and succeeded in getting the bear to drop the packs. Whether this was foolhardy or courageous is difficult to judge, but he later showed courage of a different sort in his army career by rushing into a situation where others might not (see below).

COMMUNIST PARTY

Kenneth's first year back seems to have passed with relative tranquility. During the following summer, however, what semblance there may have been of tranquility disappeared entirely. To understand what follows, it may be helpful to recall the world political situation in 1940. Hitler was on the march in Europe. After the fall of France in June and the Dunkirk evacuation of the British to England, Americans felt an immediate threat to their security. In the wake of these developments, the U.S. Congress passed a conscription law in September of 1940—the first peacetime draft in the United States—and it generated heated opposition. It was also in September that Japan became an ally of Nazi Germany and Californians had a special sense of vulnerability to a Japanese invasion. As a consequence, when a State Council of Defense was formed, it was not treated with indifference. The Executive Vice President of the Council was none other than Professor Samuel Chester May.

The Communist Party on the Berkeley campus had taken a very unpopular position: it opposed the draft and was actively mounting a political campaign for the next election, focusing on peace and opposing conscription. In August, the Party had been permitted to use a Berkeley public school building for a meeting. The Communist Party was officially recognized as a legitimate political party in California and, in the view of a majority of the school board, there was no choice but to issue the permit. This brought protests from some of the U.C.—Berkeley faculty and the American Legion, among others.

As the fall term at Berkeley opened, communism and the existence of Communists on campus were frequent topics of discussion. Then President of the University, Robert G. Sproul, with dark hints of expulsion, warned students against activities injurious to the defense program. Refusing to heed such warnings, the Communist Party went ahead conducting anticonscription meetings, but since they were held off campus, the university had no jurisdiction to intervene.

Again in September the Party asked for use of the Berkeley High School and this time their representative was Kenneth May. When he appeared before the school board, Kenneth identified himself as an official representative of the Alameda County Communist Party and of the Young Communist League, the campus branch of the Party. In fact, he was the election campaign manager for both organizations and his activities were already openly known since he had previously signed a letter to the student newspaper, the *Daily Californian*, as spokesman for "the campus branch, Communist party."

The Berkeley school board met on the night of September 25. Kenneth spent over two hours arguing in support of the new petition, which was similar to the one granted previously. The *San Francisco Chronicle* reported the meeting the next morning, identifying May as a Communist, saying he had enlivened the meeting by debating a citizen who opposed the petition.

DISINHERITANCE

Although the *Chronicle* buried its report of the school board meeting on page 11, it did not escape the attention of Sam May, on his way that morning to a meeting with the Governor of California in Sacramento. The elder May felt obliged to issue a statement to the press, saying "I have been dreading this break, and I have been expecting it for weeks." He went on in some detail to make clear that his own very strong feelings were irreconcilably opposed to those of his son.

I am in complete disagreement with the Communistic activities of my son Kenneth and I have determined that he will receive no aid from me now or after my death to carry on his activities.

I am bitterly opposed to Communism. Everyone who knows me knows that all my views are contrary to those of Kenneth. So decided are my views that I have completely disowned and disinherited him.

Kenneth seems to have a martyr complex. He seems to have gathered a lot of those beliefs in Europe.

He added that he had already taken action privately some time ago to disinherit his son. The father then left for his meeting with the Governor. After the meeting, he added to the drama of the occasion by refusing to comment on whether or not he and the Governor had discussed his son's activities. This created a story that captured the attention of the press. Newspapers throughout California and across the nation, including Chicago and New York, carried details of the ideological split between father and son, often on page 1 [42].

President Sproul, then in Los Angeles for a meeting, was asked by a reporter what information he had on the younger May. Sproul had known Kenneth when Kenneth was an undergraduate (in particular, through Kenneth's activities as a

campus leader), so he would have known to whom the reporter was referring even if Kenneth's activities in the Communist Party were not known to him. But Sproul did know of Kenneth's Party activities, and he said he thought that May had been inactive but was wiring Berkeley for more information. Sproul refused to speculate, however, on what action he might take.

Kenneth was well aware of possible consequences his public stand might provoke. The night of the school board meeting he had told his friends that despite the dangers of alienating his father and jeopardizing his teaching position, "Someone had to take the action I did, and what happens cannot be helped." The next day, following his father's statement to the press, Kenneth issued one of his own:

I first joined the Communist party as an undergraduate at the University of California because I found by actual experience in student activities that the Communists were tolerant and uncompromising fighters for the interests of the students and against reaction within and without the university. I became convinced that the Communists were correct in their analysis of the university administration and the social system of which the university is a part.

As a member of the Communist party I have seen how the party works everywhere to preserve and extend democracy, protect the living standards of the people, build the trade unions and keep this country out of war. During a stay of two years in Europe I observed the Communist parties in France and England in action and visited a number of other countries, including the Soviet Union. All these experiences convinced me that the Communist party is the greatest force for good in the world and that only through Socialism can the people of the United States solve the problem of unemployment, poverty, oppression and war.

As a patriotic American I have no other choice but to work for what I consider to be the best interests of my country and the world. [43]

Kenneth's motives seem clear enough. He believed, as did many other members, that the Communist Party was the best answer to the pressing social problems facing the United States. And he was doing what he felt necessary, as a citizen, to bring the Party's program before the people. Although his father's comment to the press after his meeting with the Governor seems straightforward, writing off a son on strictly political grounds must raise questions about his motives:

It is just one of those things that may happen to any father. Anyone who has children can understand.

For twenty years I've been fighting communism. I have students scattered all over this State who know how I stand on radicalism and communism, so I don't believe anyone will question my position.

When I became convinced my son had become an irreconcilable communist I took the only honorable course consistent with my personal views and the position I hold as an executive of the defense council. [44]

Sam May's concern about his position on the defense council belies what higher motives he implies in the rest of his statement. He was obviously trying to put as much distance as possible between himself and his son Kenneth out of the fear that, in the public's eye, the sins of the son would be visited upon the father. One can reasonably conclude, as did Walter Rogers, that he was "throwing over his son partly because of his dislike of the marriage and partly out of a notion that his

ies as a
th when
reporter
ological
d across
ory that
or not
meeting,
isinherit
beliefs
wened
views
on his
and I
his son.
take clear
is break,
May felt
ing to a
on page
ened the
ating the
ar to the
th spent
spokes-
id previ-
for both
campus
the Ala-
efore the
hool and
ne.
ut since
ings, the
s against
Univer-
Comm-

son's attitude might in some way interfere with his own ambitions" [45]. The implication that any other father would do the same is simply empty rhetoric [46].

DISMISSAL AND WITHDRAWAL FROM THE UNIVERSITY

On October 11, Kenneth May was summarily dismissed from his teaching assistantship in mathematics by the Board of Regents of the University on the basis that his political beliefs and faculty position were "incompatible." Presumably this was the result of an investigation promised by President Sproul in his interview with the press in Los Angeles. Kenneth did not let this pass, but was quoted as saying that the Regents had shown "their disregard for our democratic form of government by denying my right to belong to a legally recognized political party" [47]. The action, however, apparently met with widespread approval. As far away as Chicago, the *Herald-Examiner* ran an editorial on November 14, 1940, entitled "Let Us Have Only American Teaching," in which both the university's action and Sam May's disavowal of his son were heartily endorsed.

Kenneth, having been dismissed from his teaching position, then withdrew from the University, but made clear his reasons and the very important issues at stake:

In taking an indefinite leave of absence from the University, I wish to make clear that this action is not prompted by any approval of the decision of the Board of Regents in dismissing me. The issue involved in the dismissal is one which must be fought out if this is to be a free University. My reasons for withdrawing are indicated in the following statement:

Although my studies at the University of California have been largely in the Department of Mathematics, my interest has turned increasingly to mathematics as a tool for economic analysis, particularly in Marxist political economy and economic planning. It is in mathematical economics and statistics that I have done my graduate work. Economics, because of its proximity to the decisive issues of the day, suffers more than any other subject from the scholasticism, the divorce of theory and practice, and the outright suppression of free inquiry which tend to characterize science in that part of the world still ruled by capitalism. Although I had hoped to write a thesis in mathematical economics, I have come to the conclusion that I cannot make such a thesis an honest part of my work and development at this time. I am too dissatisfied with the theoretical framework within which it would have to be written. To construct an alternative is a task of years, not months. And it is a task which can be done only in closest connection with the daily struggles of the masses. For this reason Communist Party activity is for me not an alternative to, but a necessary part of, scientific work. These are the factors which make it possible for me without regret to leave the University for full participation in the working class movement. I hope in time to do more significant theoretical work than would have been possible within the University. Most scientists who become Marxists find that they can best carry on their work by remaining within the University and by integrating their scientific work with the struggle against scholasticism and suppression on and off campus. In deciding to leave the University, it is good to know that scores of others remain to carry on this task in the academic world. [48]

PARTY WORK

Upon leaving the University, Kenneth worked full time for the Communist Party. One event, exemplifying Ruth and Kenneth's devotion to the Party, was a housewarming marking their move into a house provided to them by Professor McGovney. It had been decided by the Party that there should be an admission

charge for this event, to raise funds for some cause (probably to support units in the Spanish Civil War), and hundreds of people were invited. Ruth McGovney Kaspin recalled her embarrassment on seeing old family friends arriving with the usual gifts for a housewarming and being asked to pay an admission charge in order to enter!

In the now famous security trial of J. Robert Oppenheimer, who ultimately lost his security clearance, Oppenheimer admitted that he often visited Kenneth and Ruth May, and therefore he might well have been at their home on September 20, 1941, in the company of Communists "alleged . . . to have engaged in espionage on behalf of the Soviet Union." As a consequence Oppenheimer was found to have "associated with members and officials of the Communist Party, including . . . Kenneth May. . . ." [49].

In the 1942 California state elections, Kenneth May was the candidate for State Treasurer on the Communist ticket. He garnered 80,425 votes while his one opponent, Charles G. Johnson, running as a Republican-Democratic candidate, polled 1,833,043 votes [50].

U.S. ARMY

The coming of World War II changed Kenneth's life once again, severing his ties with the Communist Party and ultimately bringing him back to an academic career. On June 22, 1941, Hitler launched an attack on Russia in violation of their mutual 1939 nonaggression treaty, thereby ending the façade of the Hitler-Stalin pact. President Roosevelt, regarding the defense of Russia as essential to the defense of America, began assisting the Russians directly under the lend-lease program. With the Japanese bombing of Pearl Harbor in December of 1941, American public opinion shifted away from isolationism and moved to the realization that active support of the Allies in the European war was necessary for the defense of America. President Roosevelt obtained a declaration of war from a U.S. Congress that, until then, had been recalcitrant on the war issue.

With the Soviet Union now clearly allied with the United States, it should not be completely unexpected that Kenneth became deeply committed to the war effort. With the attack on Russia by the Nazis, the American Communist Party abandoned its own pacifist stance. On December 12, 1941, with the encouragement of the Party, Kenneth sought advice on enlisting in the Army. There was no doubt an element of patriotism in this action, since only a year earlier when he withdrew from the university, he avowed that his motives were basically altruistic: "As a patriotic American," he sought "to work for . . . the best interests of my country. . . ." So, in spite of his earlier opposition to the war effort, which had cost him dearly in personal terms, he set out either to be drafted or to enlist in the armed forces [51]. In time he would earn an enviable war record, but not without first overcoming considerable bureaucratic opposition to his serving. Kenneth wrote to Walter Rogers, who in turn asked a former ICWA fellow attached to the Russian section of the Lend-Lease Administration whether May's Communist affiliation would exclude him by law from service. They thought it

might, but legalities aside, they agreed that he would have a rough time anyway because "most officers do not believe that a sane man could have [May's] particular interest" [52].

Kenneth had been trying to volunteer for service because the conscription program in the early stages of the war did not draft married men. But the following June (1942), his wife, Ruth McGovney May, filed for divorce [53]. This removed one obstacle from his being inducted into the Army, but the primary difficulty remained: his affiliation with the Communist Party. In a letter to Rogers (November 26, 1942), he succinctly described his situation.

As for the army, I have been on the receiving end of a first class run-around. My application got stuck (for the ski troops) at the [Adjutant General's Office], who is apparently too busy to make a decision for eight months now. When I was divorced, my draft board finally classified me 1-A and sent me to the induction center in August. Since then, I have become a familiar figure at the center, while new excuses not to induct me have been concocted: everything from some trifling mistake in my forms to "rejected pursuant to authority contained in First Indorsement, Headquarters Ninth Corps Area, Fort Douglas, dated April 8, 1942" whatever that means. The real reason for these delays has of course remained an open secret. Last week, I was drafted all over again only to have my induction again delayed at the center, and I am still uncertain as to what and when what will happen from day to day and week to week.

Luckily, the war as a whole doesn't seem to be handled in as bad a manner.

At the end of November (1942), Kenneth was finally inducted into the army and within a week was made a squad leader and promised a chance for transfer to officers' training school. He was assigned to the 87th Mountain Infantry, probably because of his experience as a skier and mountaineer. By June of 1943 he was showing the esprit de corps which, in American military jargon, is called being "gung ho": "I'm an auto[matic]-rifleman in a rock-climbers' platoon and hope to be in the first wave of our combat team when we land on some now unknown beach" [54]. The unknown beach turned out to be on the island of Kiska in the Aleutians; his company was among the first wave of American troops to land in August of 1943, but the Japanese had already withdrawn. The company remained there for five and a half months.

The following January (1944) he was on leave in Berkeley and visited with his father several times. "I am glad to report that he no longer sees the necessity of our estrangement. Time often clears up misunderstandings even if it seldom resolves differences of opinion" [55]. This partial reconciliation may have come about as the result of an especially poignant act on Kenneth's part. It was the custom during World War II for fathers with sons serving in the military to wear lapel pins containing a star for each son. Sam May wore such a pin with one star—representing Kenneth's older brother. Kenneth purchased a two-star pin and sent it to his father. An exchange of letters followed and finally a visit between them [56]. It is not clear whether his father was swayed by this act of conciliation, or Kenneth's new style of patriotism now along lines the elder May approved of, or by the realization that his son stood a good chance of being killed in the worsening war—likely a combination of these—but at this point the earlier damage to their personal relationship was either rectified or largely overlooked [57].

Meanwhile his personal life was definitely improving. A few months later (May 19) while home on furlough, he married Jacqueline Bromley, whom he had met about 1940 while he was Educational Director of the Alameda County Communist Party [58]. Although he missed seeing his old professor, Evans soon wrote to Kenneth confirming that he would only have to submit a thesis to complete his Ph.D. and even included some suggestions for a topic.

Throughout this period, Kenneth repeatedly applied for Officer Candidate School, taking the required examinations, but was always denied the transfer at some level of command. He felt that his talents could be put to better use as an officer, and this motivated him to make repeated tries. Walter Rogers wrote letters of support in hopes of getting fair treatment. But when promotion came, it was the result of Kenneth's own organizational skills and battlefield valor. In November of 1944, when the commander of the Army Ground Forces, Lt. Gen. Ben Lear, inspected Kenneth's company, he was so impressed by Kenneth's organization of the soldier's orientation, and by Kenneth himself (General Lear had engaged him in a discussion of strategy), that within hours an order came down promoting May from Private First Class to Corporal. A few weeks later, he was made Sergeant in charge of company communications with about twenty men to supervise.

One of Kenneth's innovations was an attempt to restructure his company's orientation program, which in part was intended to give each soldier the reasons for fighting the war. May, with his usual wit, described the former program as follows:

These lectures consisted of dull-as-dust recitations of the "facts" of the history of the war. The officer, unluckily enough to be assigned, usually read most of the hour to an audience of about 1000. I remember one session devoted to the African campaign, which consisted solely of a list of towns and the dates they were taken, lost, retaken, etc. What little interpretation crept into these lectures was based on the speaker's personal judgments. The series might have done positive harm, but the men, with unflinching instinct, slept through every session. [59]

While Kenneth was advancing the war effort, back home the papers that had once attacked him now sang his praises. He was courageous "Sgt. Kenny May" off to fight the Nazi Alpine troops. His earlier days of campus demonstrating were recalled, but now in a very different way: "But then it also took courage for a young college professor to sacrifice his campus career for his political views even if you and we found ourselves sometimes bitterly denouncing him for his local radical leadership." So said the *Berkeley Daily Gazette* (December 14, 1944) and, although he never mentioned it, this must have given Kenneth enormous satisfaction.

The *Stars and Stripes*, the U.S. Army (Europe) newspaper, in the issue of March 3, 1945, carried the story of May's career. An interview with May, just returned from combat, described him as husky, bearded, and a fearless leader. It recounted his repeated attempts to volunteer for service and to qualify for officers training, and his eventual promotion by General Lear. It also reported that Kenneth, during a battle on Mount Belvedere in the Italian campaign, rescued a wounded soldier from a mine field—a singular act of courage which May dis-

missed in the interview in his typical modest fashion. For his heroism, he received a battlefield commission as a Second Lieutenant.

In the immediate aftermath of the war, Kenneth was stationed in Italy where he was an instructor in mathematics at the Army University Study Center in Florence for a portion of 1945. During this period, he made plans to devote the first six months out of uniform to completing his doctorate at Berkeley. In fact he returned to the University of California at Berkeley during 1945-1946, including the summer of 1946, and received his Doctor of Philosophy on August 2. His thesis was entitled "On the Mathematical Theory of Employment," which he summarized as follows in the Preface.

In Professor G. C. Evans' seminar in mathematical economics, a number of problems have been investigated in terms of simplified models, especially the two industry model suggested by Evans in 1934. Francis W. Dresch has established the connection between this two industry model and a general economic equilibrium. The first section of this thesis establishes a similar but more complete result for a one industry model. The second section introduces technical innovation and capital accumulation into the one industry model in a simple way and studies the dynamic implications of Keynes' equation of effective demand. . . . The final section takes up the question of an optimum wage in an effort to avoid a merely formal solution in terms of utility functions. The question of an "optimum propensity to consume," formulated originally by Oskar Lange, is reconsidered and various solutions obtained depending on different optimum conceptions. Finally, a two industry model is used to study a simplified optimum problem in a collectivist economy.

That fall Kenneth received one offer of a position at Carleton College in Northfield, Minnesota, and accepted an assistant professorship [60]. Once again his association with Walter Rogers and ICWA was to serve him well. The President of Carleton College in 1946 was Laurence M. Gould, who, at that time, was also a trustee of the Institute for Current World Affairs. Gould had first heard of Kenneth during the war when Walter Rogers wrote to Gould trying to get a better assignment for Kenneth during the time he was being shunted around as a Private First Class. Gould was then Chief of the Arctic Section of the Army's Arctic, Desert, and Tropic Information Center and Gould's superior, Lieutenant Colonel Carlson, was an old friend of Rogers [61]. Gould recalls having first met Kenneth at an ICWA trustees dinner [62]. At any rate, Kenneth was hired and set out with his wife, Jackie, for Northfield. They arrived before their housing was prepared, so Gould directed them to the Boundary Waters region of northern Minnesota for two weeks of canoeing in a country quite different from the Sierras of California [63].

Kenneth May remained at Carleton College until moving to the University of Toronto in 1966. It was in Toronto that he died suddenly on December 1, 1977 [64].

ACKNOWLEDGMENTS

We gratefully acknowledge our debt to the Institute of Current World Affairs of Hanover, New Hampshire, for access to its archives (all correspondence to and from Walter S. Rogers cited in these notes, as well as a few newspaper clippings are from the ICWA archives); to John Dyer-Bennet (Carleton College) and Gordon Griffiths (University of Washington) for very helpful comments on an

early draft; and to Joseph W. Dauben and Stillman Drake for editorial comments. We especially wish to thank Jacqueline Bromley May for her helpful correspondence, and Ruth McGovney Kaspin for an interview of several hours. In addition Mrs. Kaspin provided several photographs of Kenneth May taken during the late 1930s and early 1940s. Many of the sources used here have been duplicated and preserved in an archival collection in the library of the University of Toronto. Research for this biography was financially supported by the Eleanor Parkin May Fund of the University of Toronto.

NOTES

1. *New York Times*, December 15, 1977.
2. *Curriculum vitae*, January 1975.
3. Letter, John Dyer-Bennet to Philip Enros, March 21, 1984 (hereafter cited as [John Dyer-Bennet 84.03.21]).
4. [John Dyer-Bennet, 84.03.21].
5. Stillman Drake, A memorial tribute to Kenneth O. May, *Historia Mathematica* 5 (1978), 3; [John Dyer-Bennet, 84.03.21].
6. Letter, Gordon Griffiths (Department of History, University of Washington) to Philip Enros, April 5, 1984 (hereafter cited as [Griffiths]); Ruth McGovney Kaspin in conversation, April 26, 1984 (hereafter cited as [Ruth McGovney Kaspin]). One of the authors (Tropp) recalls Kenneth's referring to a great-grandfather as the chief rabbi of Berlin; this has not been confirmed.
7. Kenneth sometimes attended services. He later averred that "altho I am not by any means unacquainted with the Bible, I do not belong to any church." Letter, May to Rogers, March 3, 1937.
8. A good example of this is the green belt, known as Tilden Park, which surrounds the cities of the East Bay area of San Francisco Bay [Griffiths].
9. [Griffiths; John Dyer-Bennet, 84.03.21]. There is irony in this which goes beyond Kenneth's later socialism. This is the election in which F. D. Roosevelt became President. A key factor in Roosevelt's nomination was the support of Joseph P. Kennedy, for whom Kenneth was later to work (see below).
10. Letter, W. S. Rogers to J. N. Hazard, December 15, 1941.
11. Dudley Odell McGovney (1887-1947) had been dean of the law school at Iowa University and was the author of *Cases On Constitutional Law* (1930, Bobbs-Merrill; 3rd ed., 1955, with Pendleton Howard). Ruth McGovney Kaspin says that she knows of no dispute between the two men.
12. Letter, Rogers to L. M. Gould, May 16, 1944; and [Ruth McGovney Kaspin].
13. [Griffiths]; letter, W. S. Rogers to J. N. Hazard, December 15, 1941; letter, W. S. Rogers to L. M. Gould, May 16, 1944.
14. Letter, May to Rogers, March 3, 1937.
15. [Griffiths].
16. Kenneth later told his wife, Ruth McGovney, that he was unable to look into a mirror in a dimly lighted room at night because he had come upon his dying mother reflected in the mirror of a darkened room. Still conscious she pled with him not to look at her. The death was officially an accident, apparently caused by her having turned on the gas to the heater in the bath and, having changed her mind, closing off the gas and turning on a light. A spark from the electricity ignited the explosion. Kenneth memorialized his mother in 1977 through a bequest of about \$160,000 to the University of Toronto for a fund to promote the history of mathematics, designated The Eleanor Parkin May Fund.
17. [John Dyer-Bennet, 84.03.21].
18. Transcript record from the University of California, Berkeley.
19. Letter, May to Rogers, August 22, 1937.
20. The elder Crane was a public-spirited philanthropist who had accumulated his wealth through a

family plumbing manufacturing concern. He had a record of public service which included advising President Wilson on the Versailles Peace Conference and serving on commissions and as Minister to China (1921-1922). The Root Commission to the Soviet Union, which traveled to Russia after the Revolution, showed Crane that there was a lack of American diplomatic and advisory personnel capable of leading American relations with the new regime in Soviet Russia. ICWA was established in 1925 in New York and presently maintains headquarters at Wheelock House, 4 Wheelock Street, Hanover, N.H. 03755.

21. Letter, Rogers to the U.S. Embassy, London, January 14, 1938.
22. Letter, May to Rogers, February 15, 1937.
23. Cablegram from John O. Crane to W. S. Rogers, June 18, 1937.
24. Letter, May to Rogers, October 5, 1937.
25. Letter, May to Rogers, November 10, 1937.
26. Letter, May to Rogers, January 24, 1938.
27. Ruth McGovney Kaspin stated that Kennedy probably asked Rogers for help in understanding the English, and that Kenneth was brought into the picture to help gather information on English public opinion.
28. Letter, May to Rogers, July 12, 1938.
29. Letter, May to Rogers, July 12, 1938.
30. Letter, W. S. Rogers to Ambassador Kennedy, September 9, 1938. Sam tried to get Kenneth to accompany him to Czechoslovakia, so he would be away from England when Ruth McGovney arrived en route to France [Ruth McGovney Kaspin].
31. [Ruth McGovney Kaspin].
32. Ruth McGovney Kaspin stated that such a prohibition against support of formal education was not understood by Kenneth.
33. Letter, May to Rogers, August 13, 1938.
34. Kenneth paid a visit to the girl's parents, even though he had never met them, and expressed his condolences [Ruth McGovney Kaspin].
35. [Ruth McGovney Kaspin].
36. He served on the board from 1956 to his death.
37. [Ruth McGovney Kaspin].
38. Letter, May to Rogers, February 14, 1939.
39. Letter, May to Rogers, August 22, 1939.
40. [Ruth McGovney Kaspin].
41. [Ruth McGovney Kaspin].
42. This account has been taken from issues of the *Daily Californian* (the student newspaper), the *San Francisco Chronicle*, the *Los Angeles Times*, the *San Diego Union*, the *Chicago Daily Times*, and the *New York Times* (where it appeared on page 25), and the *New York Daily News*, all dated September 27, 1940.
43. The *San Francisco Chronicle*, September 27, 1940.
44. The *San Francisco Chronicle*, and the *New York Times*, September 27, 1940.
45. Letter, W. S. Rogers to J. N. Hazard, December 15, 1941.
46. The essence of this interpretation—that Sam May took to the public press to protect himself and his own position—was shared by Kenneth and Ruth May [Ruth McGovney Kaspin].
47. The *Los Angeles Times*, October 11, 1940.

48. T
Rogers
49. C
Schuste
50. S
Vol. 6.
was con
51. L
52. L
53. A
54. L
55. L
these—
56. L
Bromley
57. S
along to
58. [J
59. L
60. [J
61. L
62. [J
63. [J
64. A
Aspects
May." i
Charles
J. Struik
The [To
Francis

HM 11 HM 11 KENNETH O. MAY, 1915-1977 379

48. Typewritten statement to editor of [blank] on withdrawing from U. Calif. Sent to Rogers by Howard Wiedemann, April 1941.

49. Charles P. Curtis, *The Oppenheimer Case. The Trial of a Security System* (New York: Simon & Schuster 1955), pp. 23, 29, 49, 50.

50. State of California General Election, November 3, 1942, "Statement of Vote," Cal. Doc. S400 Vol. 6. At that time, "cross-filing," where one candidate is nominated by both major political parties, was common in California elections.

51. Letter, May to Rogers, December 12, 1941.

52. Letter, Rogers to May, December 24, 1941.

53. Alameda County Superior Court.

54. Letter, May to Rogers, June 29, 1943.

55. Letter, May to Rogers, January 14, 1944. Kenneth always spoke of his father in terms similar to these—if he spoke of him at all.

56. Letter, Jacqueline Bromley May to Philip Ennos, March 31, 1984 (hereafter cited as [Jacqueline Bromley May]); and [Ruth McGovney Kapin].

57. Sam May did not reinstate Kenneth in his will, but some of his money was probably passed along to Kenneth by his second wife, Bernice [Jacqueline Bromley May].

58. [Jacqueline Bromley May].

59. Letter, May to Rogers, December 8, 1944.

60. [Jacqueline Bromley May].

61. Letter, Rogers to May, May 18, 1944.

62. [John Dyer-Bennet, 84.03.21].

63. [Jacqueline Bromley May].

64. A second half of this biography is planned for a forthcoming issue of *Historia Mathematica*. Aspects of Kenneth May's biography after 1946 may be found in "A memorial tribute to Kenneth O. May," *Historia Mathematica* 5 (1978), 3-12, with contributions by Stillman Drake, H. S. M. Coxeter, Charles V. Jones, Henry S. Topp, Christoph J. Scriba, Bruce Sinclair, Michael S. Mahoney, and Dirk J. Struik. An Eloge by Henry S. Topp appeared in *Isis* 70 (1979), 419-422. Obituaries also appeared in *The [Toronto] Globe and Mail* (December 9, 1977), the *Toronto Star* (December 9, 1977), the *San Francisco Chronicle* (December 14, 1977), and the *New York Times* (December 15, 1977).

advising
insister to
personnel
blished in
k Street,

standing
English

enneth to
y arrived

ducation

essed his

per), the
nes, and
all dated

self and