



# Congressional Record

PROCEEDINGS AND DEBATES OF THE 92<sup>d</sup> CONGRESS, FIRST SESSION

## Tribute to Dr. Frank Rosenblatt

SPEECH  
OF

**HON. HUGH L. CAREY**

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, July 28, 1971*

Mr. CAREY of New York. Mr. Speaker, I take this time during the passage of the 92d Congress to call attention to an event which had an element of tragedy attached to it, in that a man whom we might call a universal citizen was called to his eternal reward at a very early age.

I refer to the recent death, on July 11, of the distinguished member of the New York academic community, Dr. Frank Rosenblatt, who was a most gifted human being. Dr. Rosenblatt had made his entire life a contribution to mankind. Close by to the Capitol here, during a period of recreation, he suffered a boating accident which took his life. In this brief episode we saw the ending, at least for this time, of a career of dedication and devotion in the field of the academic and in the field of human resources.

Dr. Rosenblatt's career as scientist, inventor, and as a professor and leader at Cornell University in the great State of New York, marked him as a most dedicated citizen, and it brings to mind, as I said, the concept which we always try to understand of the universal man.

Dr. Frank Rosenblatt's spirit will, I hope, endure through others who will be inspired to follow in his footsteps, because throughout his life he gave freely and generously to young people who were in his classes and in his company, and, in fact, he made his life a total inspiration to the young people around him.

Dr. Frank Rosenblatt was known to many communities, including the world

of politics. He was strong in his sense of devotion and dedication to mankind, strongly on the side of activities for lasting peace, and for more understanding among nations and among people.

There are, I understand, plans being made at Cornell to establish a library in memory of Frank Rosenblatt, that would be devoted to his field of neurobiology. In this way some measure of his exploration into the mystery of the human brain processes can be assisted, and his endeavors go forward through the efforts of others. I hope this valuable memorial will come into being and be widely supported.

We who knew Frank Rosenblatt and worked with him in his various endeavors share, I know, a deep sense of loss with his sister, Mrs. Bernice Evans, of New York, and with his brother, Maurice Rosenblatt, who is known to many of us in Washington through his efforts to improve politics in our country, and, therefore, to improve our country through politics.

We who are in the world today have lost, indeed, a rich resource in that Dr. Frank Rosenblatt is no longer with us, but I think the tribute which I shall put in the RECORD at this point particularly and deeply demonstrates the mark he made upon the several communities which he inspired. The memorial service at Cornell University on Friday, July 16, was moving and poignant. I think that many people, in various communities, will appreciate this record of a rich and humane life.

Those who spoke at the service were:

Director Richard D. O'Brien, director of biological science, Cornell University.

Assistant Professor Howard Howland, department of neurobiology and behavior, Cornell University.

Father David Connor, university Catholic chaplain, Cornell united religious work.

Rod Miller, friend and former student of Frank Rosenblatt.

Senator Eugene McCarthy.

Rabbi Morris Goldfarb, university Jewish Chaplain, Cornell united religious work.

An obituary which enumerates some of Dr. Rosenblatt's scientific work is followed by the tributes at the Cornell service:

[From the New York Times, July 13, 1971]

**DR. FRANK ROSENBLATT DIES AT 43; TAUGHT NEUROLOGY AT CORNELL**

EASTON, Md., July 12.—Dr. Frank Rosenblatt, associate professor of neurobiology at Cornell University, died here yesterday in a boating accident. It was his 43d birthday. He lived in Brooktondale, N.Y., an Ithaca suburb.

An originator of perceptive theory, he had developed an experimental machine that could be trained to identify automatically objects or patterns such as letters of the alphabet. The instrument was an electro-mechanical device consisting of a sensory unit of photo cells that viewed the pattern shown at the machine, association units that contained the machine's memory and response units that displayed visually its pattern-recognition response.

**EDUCATED AT CORNELL**

The son of the late Dr. Frank Rosenblatt and Katherine Rosenblatt, the scientist was born July 11, 1928, in New Rochelle, N.Y. He obtained his A.B. from Cornell in 1950 and his Ph.D. in 1956. He then went to the Cornell Aeronautical Laboratory in Buffalo where he was successively research psychologist, senior psychologist and chief of the cognitive systems section.

In 1959 Dr. Rosenblatt went to Cornell's Ithaca campus as director of the cognitive systems research program and as lecturer in psychology. Seven years later he joined the section on neurobiology and behavior within the newly formed division of biological sciences and became an associate professor. At his death he was acting chairman of the section.

Dr. Rosenblatt's research interests were broad. One aspect dealt with models of brain function. In 1958 he described what he called a Perceptron, an electronic device constructed on biological principles that showed an ability to learn. He developed the concept in a book, "Principles of Neuro-dynamics," and gave a course in brain mechanisms and models.

**STUDIED BEHAVIOR TRANSFER**

In 1966, he investigated the transfer of learned behavior from trained to naive rats by the injection of brain extracts and published extensively in this area.

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Dr. Rosenblatt was also interested in astronomy. At his death he was trying to develop a new method for the detection of satellites.

He is survived by a sister, Mrs. Bernice Evans of New York, and a brother, Maurice of Washington.

A memorial service will be held at Cornell in Ithaca at date to be announced.

**MEMORIAL SERVICE FOR FRANK ROSENBLATT, JULY 16, 1971, CORNELL UNIVERSITY**

*Father David Conner:* All of us are here today to share the mourning and also to celebrate the life of a person whom we loved: a colleague, a friend, a brother to anyone who had the privilege to know him. At the request of those who knew him best, and loved him most deeply, the memorial service for Frank Rosenblatt will be simple and honest. Everyone who's here by rights could speak, and should. Because there are many overflowing words and silences that we would like to share with everybody. Those who do speak, will speak from their own personal recollections, and after we've shared this memorial service we will all go to his house if you want to, to talk to each other, to console and to be close with those who loved him. The person who will speak to us first is Dr. O'Brien, head of the Division of Biological Sciences, and a very close friend of Frank.

*Dr. Richard O'Brien:* It was my privilege to know Frank for something like ten years, and when someone who's been close to one for this length of time is suddenly taken from us, it's a time when we look back on that knowledge, that relation. And especially when it's an unusual man, as in Frank's case, we try to ask ourselves what it is that was unusual about him, and about the relationship. And in the last days, in casting my mind back, to try and think why he was a special man, it seemed to me that it comes back to the question of what university professors are all about. Most of us are rather schizoid individuals; we have two kinds of lives. One is that of the scholar, and the teacher, and the seeker after truth, and the sort of person you think of when you think of groves of academe and ivory towers, who is not concerned with self or with self-interest, or with his own personal rewards, but only with pushing back the understanding of the universe. But most of us also live on a second plane, and a relatively selfish plane, which is concerned with things like rank, and income, and tenure, and promotions, and numbers of square feet of laboratory space, and numbers of grants, and things of this kind. And most of us do a reasonably good balancing act between these two kinds of personality. And I think the strange thing about Frank was that he lived almost exclusively in that first world, and he was always totally unconcerned with his own welfare and with practical things. He didn't care how he dressed, or how he rode in his car, and in the several years in which I had the pleasure of being his Chairman, he never

came to speak to me about secretaries and footages, and how to get another grant, but always about science and the discoveries in his laboratory the day before. He was, I would say, not a prudent man, he didn't take advantage of things for himself, nor look out for himself. For instance, it was only a few years ago that he enjoyed hundreds of thousands of dollars a year in research grants, from agencies that thought his work was worth doing, and he was a victim of the Mansfield amendment, and within a few years that money melted like summer snow and soon he had very little left in the last few months.

And yet all these sort of drastic happenings had remarkably little effect upon Frank, he was sorry for his colleagues and for his students, who were put out by these situations, but somehow it didn't impinge on him emotionally, as it would for many people. And this imprudence, which was sort of a lovable character of his, extended in so many different aspects of his life. For instance, I will remember the place when his tenure came up. As you know, when a university grants tenure, it declares it will support a man for the rest of his life, and for most professors this is a terribly serious time in life, and one they think about a great deal, and try and make sure that the omens are favorable and everything works out well, and when some five to six years ago Frank's tenure came up I found it impossible to move him in prudent directions. I pleaded with him to make sure his research was published in respectable journals, and he couldn't understand me, because it was available in libraries, and people could read it if they wanted it, and what any tenure committee thought about it mattered nothing to him. At the very time when his tenure was about to come up, he came up with an imaginative, and entirely out of place proposal to look for a life from outer space, by studying coherent light, received from the universe. And I begged him not to put such an imprudent proposal at such a delicate time, because I said there were many people . . . your character is disputatious, Frank, there are those who will say this is just another mark of how you're not a solid citizen. And needless to say, Frank couldn't understand me. He said, "But that's nothing to do with it, it's a good idea and it's a good proposal, I'm going to put it forward." And he did. This imprudence extended to his selection of all his research career. He would never do, as prudent professors do, pick out some small aspect of the physical universe which could be studied, and could reasonably be expected to produce solutions in a year or two so that someone could come up with a sensible reputation. Instead he would reach out and grasp the biggest problems that he could see, and apply himself, throw himself into the study of them, without any recognition of the fact

that if he made bad choices, or if he chose, as he usually did, problems which were not likely to yield a solution within ten or twenty years, that this would redound to his disadvantage. He never worked that way.

He built up, in fact, two research reputations. One grew out of his invention more than ten years ago, of an instrument called a Perceptron, an electronic device that was able to learn the recognition of patterns, and there was a good deal of publicity about it at the time, which stressed the utility of this and how it had led to the possibility of making machines which could do things like scan radar screens, and do practical useful things like that. And of course the real basis of that research was nothing of the kind, his intention was to find out the fundamentals of how brains work, he wanted to ask himself what are the minimum number of things that a brain has to have physically in order to perform the amazing things it does, particularly in the area of recognition, and memory and learning, and those related events. And so for years, he wrote and researched in this whole area of artificial intelligence, and we still don't know whether in fact he was on the right track, or whether it was a false track. What we do know is that the years of research there that he and colleagues built up, open up to us, make clear to us, that the understanding of these very important biological phenomena, was a thing that one could study, one could research for, one could think about, one could analyze. And whether or not brains turned out to be wired up, the way Perceptrons are, is less important than the fact that he lifted the veil and enabled us to examine all these possibilities and see that ideas like this were within human grasp.

And then five years ago, he was also very imprudent in that he became fascinated by a report that if one trained rats in particular tasks, you could transfer some of that training to another rat, by injecting brain extracts of the first. Now we know these days that in fact those early reports were probably wrong, they made extravagant claims. And yet Frank devoted several years, the last years of his life, to that, and to my mind showed convincingly that whoever allowed the initial reports of larger effects were indeed wrong, there is indeed a small but extremely important effect; and the devotion with which he pursued this, the care and the scientific acumen he brought to pursuing this tremendous task, which couldn't conceivably be finished within a decade or two, were also tributes to the sort of mind he had, and the sort of person that he was. And in this too he was widely recognized, he built a new international reputation in the second area, and only a few months ago was in Budapest giving lectures in international symposiums on this work.

Finally, I must say that quite outside these relatively narrow spheres, his mind knew no limits, quite literally, and in February he published, *Neurobiologist* published a proposal for the detection of satellites to stars from outside the solar system. The paper, which I read over again just yesterday I think characterized Frank so clearly, because it showed that sort of great grasp of the greater picture, the looking for events outside this very world, in fact, and then went on coolly and calmly to evaluate the details to describe the precise way that you would go about it: he had a system of three telescopes that would scan 9,000 stars each night to see if they had satellites, and calculated the probability that one might find something useful out of all this data. And it seems to me that that kind of mixture of the astronomically large view that he had, and the overview of the world, and that ability to bring it down into the realities so that we could grasp it with our own hand really characterized him. And you would have to say that beneath his exceptionally mild and quiet manner there was really a ferociously active intelligence which reached out to grasp great things. We are hoping that we will provide some sort of memorial which will be associated with these sorts of activities of Frank's, which made up such a great part of his life. And yet not all of his life, as other speakers here today will say. There were aspects of his life entirely outside those which I've touched upon, which demonstrated the amazing breadth of his mind and of his sympathy and understanding. The fact that that great intellect and that generous mind has been snatched from us suddenly makes us all very much the poorer. Professor Howland will say something about Frank next.

*Professor Howard Howland:* Frank Rosenblatt was not only a teacher and researcher, but also a man who was deeply concerned with the welfare of the university, its ideals and its reality. In that capacity he also served the Cornell community well. It was part of Frank's genius that he was acutely sensitive to the political events around him, that he grasped their deeper implications more rapidly than other men, and that he responded to them with forthright action. Thus in the Spring of 1969, when Cornell was shaken by great political upheaval, it was not surprising that he actively engaged in attempts to restructure and restore the governance of the university. Frank's was a selfless devotion to rational governance, and because of that selflessness, he was one of its most able defenders. Many of us recall how, in the most emotional of public debates, Frank would rise and in calm and measured tones lay the alternatives before his listeners, and bring the discussion back on the path of constructive action. This same selfless devotion meant for Frank that no task and its defense was too small or menial for his atten-

tion. He attended endless meetings, and participated in innumerable discussions. He was a good listener and a good advisor, and above all he could be counted on to do the next necessary thing no matter how bleak the outlook of success. After playing a major role in guiding the proposal for the constituent assembly both through the university faculty and the Barton Hall meetings, Frank went on to serve on that constituent assembly. He was chairman of the summer research committee, on the relationship of the university to minority groups, and compiled its report on the university and the disadvantaged. In the introduction to that report he summarized his humanitarian view of the obligations of the university. He wrote "The university has a moral obligation to help provide equality of education, equality of educational opportunity, for those who have been deprived of it by virtue of race, poverty, or social circumstances. This includes making potential students aware of the possibility of a university education, making it possible for them to enter, making it feasible for them to stay, economically and socially, and providing studies relevant to their needs and interests. This applies to foreign students as well as to Americans." Such was his idea of the university. Late in the Fall, long after the excitement of the Spring had passed, when the constituent assembly had almost exhausted its strength in its attempt to provide a viable senate proposal, Frank again lent his full energies to the construction of a successful document which became the constitution of the Cornell Senate. Frank Rosenblatt was no stranger to the thrill of the larger political arenas, or the sweet taste of professional success. The fact that he gave so generously of his abilities to his university when it needed him is a testimony to its embodiment of a dream of a rational and equitable society for which he strove. We are all the richer for his example.

*Rod Miller:* I'm Rod Miller. I met Frank when I was a Freshman, and didn't know him very well during that year. At the end of the year I was busted for smoking pot, and I put off going to see Frank for two or three days because I thought—that was the only faculty member I knew at all—and he'd say, "Tough luck, kid." And I went to him finally, and I was really surprised and shocked to find that I still had a friend in Frank. And in the next years I was a biology student and couldn't understand why Frank didn't have a wife and kids. I was interested in evolution, perpetuating self, and such. And I talked to Frank and he made me see that there's so much more in terms of the culture, ethnic ideals that you can pass on. And I lived at his house and he used to read to us after dinner. We read *Canticle for Liebowitz*, *Alice in Wonderland*, *Through the Looking Glass*, the Ring Trilogy, *The Once and Future King* and many others. *The Wind in the Willows*. One chapter Frank came to and he said, "This chapter's about

me." And it's about Mr. Toad, who had wanted to get a bright shiny red motor car, and he was obsessed with this idea, and Frank identified with Mr. Toad, and he had many shiny red motor cars; projects. At the house, he'd get involved in interstellar communication, painting, sculpture, mountain climbing, and we'd all say, "Frank doesn't know anything about that," and two weeks later Frank knew something about it, and two months later he knew an awful lot about it. He'd work away at his desk computer, sometimes twenty hours a day, scribbling notes on napkins, on the back of check stubs, anything that was white. And he was a father to all of us, I guess. And in a sense we were a father to him. Frank was an absent-minded professor, I guess. He had to have an appointment made for him at Browning and King to get a suit, because he'd never get around to doing it himself. And he had to be reminded that the stop light had turned green two times now. When we found out at the house, somebody sort of summed it up . . . said that she thought we'd all be dead from cancer, or something else before Frank, before anything ever happened to Frank, because Frank was the center of so many people's lives, and seemed to be the only stable thing around. And his house was like . . . students flowed through it . . . there'd always be Frank with another shiny red motor car.

*Father Connor:* I first got to know Frank during the time of the years of crisis, I guess we could call that '67 until 1971. There were many professors that turned up, but there was never one who was so omnipresent as Frank. When everyone else was exhausted, and the cause seemed lost, Frank would still come to the meeting, and speak his heart, and encourage us. The reputation that he got, that I understood, was as someone who couldn't say no to anyone. I don't think there's probably anyone on campus who's ever had him refuse him anything that he's asked. And because of that particular quality, he had the most incredible groups of friends, associates, people crashing into his apartment, wayward youngsters. And it was always intriguing to me to see a man, who was doing such important work, with such an incredible mind, to have the personal touch, to always take time from his work and turn to someone in need. He was more than a teacher and a professor. He was a man who taught with everything he did, who had his personal life run into his work. He allowed himself to let people get close enough to hurt him, or to heal him. He was a man of deep compassion, and his mind, which showed him how institutions work, which gave him all the reasons the rest of us have for cynicism, also allowed him to be a man who believed. He believed in the individual, he believed in each person who came to him. And that's why so many people are here today who have come back. They've

come back because they couldn't do anything else during this period, because the shock which they all felt, whether they read it in the *New York Times*, or someone phoned them, or someone told them, made them stop everything else just as he stopped everything else when they needed it. I can't give any greater tribute to a human being than to say that he was a man who loved, and the faith that he put in people, which more prudent members of the community would say: Frank, you believe too much in them, always brought fruit. The second, the third, the fourth chance that he gave someone let them become that which they could become, let them rise to the stature that he glimpsed in them with his incredible insight. And I guess what he's planted in each one of us, that we might call inspiration, or hope, will never be stifled, it will live and grow. All those who are here today, who would like to, are welcome to come to the house. If you haven't seen the house, it's beautiful. I never knew when I first met Frank that he wasn't married, because he was always talking about his kids. And I understood when I met them that they weren't his kids, and yet they were his kids, in the way that Rod described it. One of the most imprudent things that Frank ever did happened in 1968, when he interrupted his life for three months because he saw a vision, because a man inspired him, gave him a hope, that there could be indeed a moral politics, there could be in the dearth of charismatic and insightful leadership, someone who the people could call to authority and to power. So he set aside his research, his teaching, he set aside many of his own needs, to go from New Hampshire to California and to put his particular insights and talents to use. So that that charismatic man could lead the people of this country away from the death and destruction, the racism and the hatred. The man that inspired Frank and many of us here is with us today. Senator Eugene McCarthy.

*Senator McCarthy:* I am here today not so much to participate in a memorial to Frank Rosenblatt as to pay testimony and tribute to him. I could say very little of my direct and personal experience with him, or my direct knowledge of what he has done and what he has been to people. I speak of him from what I know of him principally through his influence on other people. And so in my case, as I sense from what some of those who've spoken before me have said, his having died does not so much leave me feeling a loss as it has brought me to realize what a presence he was, and to look forward to a continuation of that presence. I've tried to reflect on what his character was, and I've come to two conclusions in a way. That it was almost as though he was a different order of being. I hesitate to use the word angelic, as we're inclined to think of angels as rather soft and uncommitted people, but we take some

of the harder definitions, and it involves a very firm and complete commitment of intellect to whatever the problems the angels have to face. And the disposition not to pass moral judgment, as if having made a great moral decision at some point, he was rather free from the obligations which some of us seem to carry through life, making moral judgments on most everyone who passes by. It was as though Frank had decided, that at least as far as he was concerned, that he would try to eliminate all the evil and all the distress that comes from ignorance and from lack of knowledge, and following that decision his commitment was very complete. Along with that, he was if anything, it seems to me, a kind of universal brother, brother to the members of his family, to the members of the faculty who knew him, to the students who have spoken here, and I think in a sense to all of us. The nature of his affection was a brotherly one and as he became more and more his own person a brother to the land, and a brother to the youth of this nation, a brother to all the simple things of our existence, a brother truly to the universe itself. So in that conception, a man pure in spirit and fully committed in intellect, a brother to all things. I'm here with his own family and his almost universal family to pay tribute and to give testimony to his life and to his influence.

*Rabbi Morris Goldfarb:* There are times when our own words are inadequate to express all that we feel within, and to bring to fore those emotions, those thoughts which are present in our hearts, and so we look to the past, to the pages written by sages who might bring a word of consolation and hope for us. And these words, from the book of Ecclesiasticus, perhaps might serve in that capacity:

Fear not death, we are all destined to die; we share it with all who ever lived, with all who ever will be; bewail the dead, hide not your grief, do not restrain your mourning; but remember that continuing sorrow is worse than death; when the dead are adrift let their memory rest and be consoled when the soul departs; seek not to understand what is too difficult for you; search not for what is hidden from you; be not over-occupied with what is beyond you; you have been shown more than you can understand; as a drop of water in the sea, as a grain of sand on the shore, are man's few days in eternity; the good things in life last for limited days but a good name endures forever.

*Rabbi Goldfarb* read two prayers in Hebrew.

At the graveside Father Conner read the following poem by Frank Rosenblatt:

COURAGE

Courage is to smile  
When the doctor jabs the needle  
Into frightened flesh, thinking  
(But not saying) "Look, Mother,  
How brave I am!"  
Courage is to see dreams crumble,

And then shaking out the dust,  
To dream again, to apprehend  
The ambush hidden in the path  
And still go forward to explore  
Within the hidden craters  
Of your own desires; to submit  
The working and creations of your mind.  
For public judgment.  
And courage  
Is to hope  
When others have surrendered.  
And courage  
Is to face surrender  
When others hope.

Mr. ECKHARDT. Mr. Speaker, will the gentleman yield?

Mr. CAREY of New York. I yield to the gentleman from Texas.

Mr. ECKHARDT. Mr. Speaker, I thank the distinguished gentleman from New York for yielding, and also thank him for making it possible for some of us who were Dr. Frank Rosenblatt's friends to give expression to that thought. I had not known Frank Rosenblatt long, but he was a man of that intensity of intellect, that warmth of spirit that made me feel I knew him intimately. I was privileged to share his family's response when I first expressed my condolences. The family response, both philosophic and poignant was—

We had the comfort of having had him for 43 years.

From what I know from friends and what I have observed from a lamentably short experience, there would have been from year to year a deeper pleasure from being in his company.

The expressions of some of these friends was contained in the memorial services for Frank Rosenblatt on July 16, 1971, at Cornell University, which the gentleman has placed in the RECORD. These express more eloquently than I can, being from those who were close friends, many of whom were of great prominence in the academic and political communities, the feelings which I also share.

Mr. Speaker, I thank the gentleman again for this opportunity.

Mr. THOMPSON of New Jersey. Mr. Speaker, I am honored to join in this tribute to Dr. Frank Rosenblatt whose untimely death has removed from the scene one of the towering intellects of our time. Others much more qualified than myself will speak of Dr. Rosenblatt's immense contributions to the science of learning, particularly, his research into the function of the brain. I would wish

to say just a few words as to his contribution to the university that he served so well during those turbulent days when Cornell University was meeting its most serious challenge.

Those who worked with Dr. Rosenblatt in those trying times have given eloquent testimony to his patience, his concern for the sensibilities of his students and col-

leagues, and above all, his deep sense of understanding of the issue and emotions involved. We have lost in his passing a gifted humanist and a remarkable scientist. Seldom are such qualities met in one man. I know that I express the sense of all our colleagues when I extend my sympathies to his brother, Maurice, and his sister, Mrs. Bernice Evans.