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CONFESSIONS OF A CENTRAL BANKER

By

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ELMER WOOD MEMORIAL LECTURE

Delivered as part of

BUSINESS WEEK PROGRAM

in celebration of

the Fiftieth Anniversary of the  
School of Business and Public Administration  
University of Missouri, Columbia, Missouri

Friday afternoon, April 10, 1964

## CONFESSIONS OF A CENTRAL BANKER

By Karl R. Bopp

Bilde mir nicht ein, was Rechts zu wissen,  
Bilde mir nicht ein, ich könnte was lehren,  
Die Menschen zu bessern und zu bekehren. 1/

My appearance this afternoon rather than three months ago is an irrelevant illustration of one confession that I shall make; namely, a practitioner sacrifices personal preferences to meet the convenience of others, if the adjustment is literally possible and does not involve violation of any basic principle.

A year ago I felt obliged to accept Professor Walker's invitation to deliver a lecture in honor of Professor Wood because both are close friends and former colleagues. I was instrumental in bringing Walker to Missouri and Wood has influenced my thinking for more than three decades. It seemed altogether fitting for the University of Missouri to memorialize one of its greatest scholars with a series of lectures. Frankly, I was flattered to be asked to participate in the celebration even though the substance of any memorial is transitory and ephemeral compared with the lasting influence of the teacher we memorialize.

Since Elmer had indicated that he would retire at the end of the first semester, we agreed on January 10 as the date for the lecture. I was enthusiastic when he was persuaded to remain another semester, primarily, to be sure, for the University, but importantly also because it would enable Mrs. Bopp and me to visit our daughter, Joanna, midway between examinations and the Easter holidays.

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1/Goethe, FAUST, ll. 371.3. As translated by Taylor:

I do not pretend to aught worth knowing,  
I do not pretend I could be a teacher  
To help or convert a fellow-creature.

Later still, Pinkney asked me to postpone the talk again so that it might coincide with the celebration of the Fiftieth Anniversary of the School of Business and Public Administration. Whereas I was delighted to make the first change in dates, I was less happy to make the second. Two considerations induced me to make the change. The first is an abiding attachment to the School. I dedicated my first book to the School in these words: "To the esprit of the School of Business and Public Administration at the University of Missouri. Unfortunately only those few persons who are or have been members of its faculty can appreciate this dedication. But each of the former will know; and each of the latter will remember -- and, remembering, will understand." The second circumstance is that the Federal Reserve System also is celebrating its semi-centennial. So, I set aside my personal preference and appear here today.

Pinkney indicated that the change in time and circumstances would involve changes in content of the lecture, such as inclusion of some reference to the environment of the School during my residency as student and teacher from the mid-twenties to the early forties. I sensed a note of surprise in his voice, however, when I mentioned an integral facet of that life that I proposed to recall; because it has no obvious, immediate connection with technical training in either business or public administration. It is the reading of poetry, especially by David Halfant, as only he could read poetry in his beautifully modulated monotone. If you are skeptical of that apparently contradictory description of his voice, you may gain some diluted impression of the discussions that Dave, Russ Bauder, Jay Heinberg, and I, a mere student at the time, used to have. Of course, each of us specialized in some aspect of business or public administration; but fundamentally the horizons of the School were as unbounded as those of poetry and philosophy.

It is the spirit of adventure into the great unknown future of mankind that attracted students with uncommitted, inquisitive minds to the School of Business and Public Administration. Public evidence of the heroic and unconventional character of the environment is there for all to see. I mention a single item to illustrate: DR Scott's THE CULTURAL SIGNIFICANCE OF ACCOUNTS. Does that title sound dissonant? It is not: read the book, now, decades later, and learn of the kind of germinal yeast to which we were subjected by Harry Gunnison Brown, J. Harvey Rogers, and Myron Watkins. To those of us on the inside the evidence of intellectual ferment was impressive indeed.

When Pinkney sensed the direction in which my inclination was heading, he quickly established a condition: he allowed me but a single stanza from one of the poets. I am sure that those who created that environment would understand why I finally chose to quote from Eliot's PRUFROCK rather than from Dowson's CYNARAE, or from e e cummings' is five, or from Carl Sandburg. Here are the words that seem most appropriate to the occasion:

Would it have been worth while,  
To have bitten off the matter with a smile,  
To have squeezed the universe into a ball  
To roll it toward some overwhelming question,  
To say: "I am Lazarus, come from the dead,  
Come back to tell you all, I shall tell you all" --  
If one, settling a pillow by her head,  
Should say: "That is not what I meant at all;  
That is not it, at all."

Just so, I am not at all sure that my "confession" will turn out to be what you expected to hear -- not sure at all.

I begin with 1941, when I left the University of Missouri to join the Federal Reserve Bank of Philadelphia. That decision was determined by several converging forces. First, Alfred H. Williams, President, and Thomas B.

McCabe, Chairman, asked me to join the staff of the Bank. Second, I found it increasingly difficult to inspire students, who faced imminent induction into the armed forces, to get excited about matters of money and finance. Third, this lull in student interest seemed an appropriate occasion to learn about central banking from the inside, so that I could be a more effective teacher when they came back. Fourth, I was a self-assured young man who had definite views as to what monetary policy was proper and felt I could help improve the performance of the Federal Reserve System. Frankly, as observer, I wondered how the Reserve System could make so many mistakes. Incidentally, it probably comes as no surprise to you to learn that I now often wonder how observers can be so sure that correct policy is really as simple and obvious as they say it is.

Some problems that did not occur to me as student or even as teacher now trouble me more and more as I acquire experience and feel the responsibilities of a practitioner. The first concerns the inadequacy of contemporary monetary theory to serve -- as it should -- as a basic tool for practitioners.

I should state at the outset that I have a firm conviction -- or prejudice, if you prefer -- that those who purport to contrast theory with practice are rearing a false dichotomy. To me the real issue is not theory versus practice but operationally valid theory and relevant practice, on the one side, versus false theory -- or no theory or pure empiricism or solipsism -- and bad practice on the other.

My own view always has been that actions should be based upon an internally consistent theoretical structure whose premises are relevant to the actual world in which we live. Since I have always held this view, you might appropriately ask what has happened to me since I left the University of Missouri some two decades ago?

An answer that might appeal to you is simply to confess that I

contracted what some of my academic friends call the occupational disease of central bankers: an insistence on the impotence of monetary policy when economic developments go awry and a -- not too -- reluctant willingness to accept some credit when developments are favorable. You can understand why this answer does not satisfy me completely.

What seems to me to have happened is that a sanguine hope, indeed expectation, of those days has not materialized. This was the optimistic belief that as more qualified individuals devoted greater effort to developing monetary theory a generally accepted core of ideas would emerge. I reached this conclusion from countless hours of discussion on the history of science, especially with DR Scott and August Maffry. Incidentally, I had a hunch that the version of truth toward which all were heading was almost exactly what I had been taught and was teaching. Even in those days I was willing to make a few minor concessions to those benighted scholars who had not had my particular -- almost unique! -- advantages.

Once I became an insider, living with problems from day to day, I learned that my theory did not pass the test of experience. Ever since, my problem has been to ascertain or determine what theory is valid and operational. Many friends and other scholars have done their best to help me. They have told me how to behave. My tragedy is not lack of answers but rather lack of agreement among the answers. This is quite understandable; because each of us is a product of his own heredity and environment and these differ. I speak of my contemporaries to illustrate the point. Why is it that so many of Kemmerer's students at Princeton became pure gold standard disciples? Why did so many of Willis' students at Columbia come to accept the real bills doctrine of commercial banking? Turning to myself, why did the arguments of these eminent teachers, which were so cogent with their students, leave me unconvinced even though we

discussed them thoroughly -- or at least so it seemed to me -- in graduate seminars? Could it have been merely coincidence that my initial teachers in this field were Harry Gunnison Brown and J. Harvey Rogers, both of whom just happened to have come to Missouri after being favorite students of Irving Fisher at Yale? Is it mere happenstance that I still feel a twinge of conscience when I cannot accept the mechanistic approaches of Friedman and Warburton? I must confess, however, that a little more exposure to Meltzer and Brunner may finally liberate me.

It is Elmer Wood who convinced me of the inadequacy of this approach. Indeed, my intellectual debt to him is unlimited. A decade ago I acknowledged the debt with a token payment by dedicating to him the results of several years of intensive technical work, published, in translation, under the title: DIE TÄTIGKEIT DER REICHSBANK VON 1876 BIS 1914. Anyone who doubts that a professor influences his students might compare the basic train of thought in this essay with that in Wood's monumental ENGLISH THEORIES OF CENTRAL BANKING CONTROL: 1819-1858. If he still has doubts, he might try to uncover this train of thought anywhere else at an earlier date.

Incidentally, I should like to take this occasion to commend the University Press for publishing his MONETARY CONTROL. I have a hunch that some readers and reviewers assumed that they could skip, without loss, the dozen pages appended under the characteristically innocuous title: "Note on Bank Deposits -- How They Originate and What Determines Their Amount." My own view is that there is revolutionary yeast in those pages, which, if absorbed, could energize monetary theory for many years to come.

Meanwhile quotations from governmentally-sponsored projects will illustrate how far apart contemporary observers are -- not as to the institutions, the magnitudes, and other "facts" of the financial world, but -- on the

interpretation of these facts and on the essential nature of the task that confronts central bankers. As a responsible practitioner, I introduce these quotations with these gratuitous comments to the authors: When I become depressed, I envy your certainty; when I juxtapose your profundities, I wonder how each of you can be so sure -- and yet be unable to persuade the other!

The first series of quotations is from the Report of the so-called Radcliffe Committee on the Working of the Monetary System. The first substantive comment in that Report reads as follows: ". . . it is the liquidity of the economy, rather than the 'supply of money' that the authorities should seek to affect by their use of monetary measures . . ." (par. 10). The Committee repeats this view later in these words: ". . . the object of the monetary authorities must be to act, not upon the 'supply of money' (however that is defined) but on the liquidity position of the system as a whole." (par. 125.) Although I have read the Report several times and key paragraphs many times, I have not come across a precise, operational definition of liquidity. The Committee does rephrase this basic idea, however, in these words: "The authorities thus have to regard the structure of interest rates rather than the supply of money as the centre-piece of the monetary mechanism. This does not mean that the supply of money is unimportant, but that its control is incidental to interest rate policy." (par. 397.)

The second series of quotations is taken from the work Professor Meltzer is doing for the House Committee on Banking and Currency: ". . . the relation of the money supply to economic activity is sufficiently close that we can count on a reasonably reliable and predictable effect, provided that we have adequate control of the supply of money." He then goes on to say: "Monetary policy is predicated on the notion that there is a reliable connection between the quantity of money and money income. . . . Evidence from a large



number of countries and many different time periods suggests that money and money national income are closely associated."

Incidentally, it is when I read such dogmatism as that of Meltzer and Brunner that I repair to Goethe's FAUST and recall Mephistopheles' sage comment:

Grau, teurer Freund, ist alle Theorie, 2/  
Und grün des Lebens goldner Baum.

In the hearings now being conducted by the House Committee on Banking and Currency, a former president of the American Economic Association and winner of the John Bates Clark Medal of that Association, warns the Committee against the advice that he expected another Clark Medal winner to give them. Incidentally, he anticipated the evidence correctly. Of course, it is frequently easier to predict what an economist will say than how an economy will function. I do not venture to guess what monetary policy would be like if the Board of Governors or the Federal Open Market Committee consisted exclusively of such individuals. One might be able to predict what each would say and that the debate would be interesting; but how does any group reach even a bare majority decision except through compromise and concession on the part of individual members? And if each is so sure he is right, how can he make any concession? Yet, obviously, the final result must be one policy for the group, not a different policy for each member. An alternative is to have a single head of the central bank. This might satisfy -- at least initially -- the person selected; but it is understandably not a solution we have been willing to accept.

I hope that the quotations from those who are so free with advice will give you some feeling for what mere practicing central bankers are up against.

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2/11. 2038.9:

Grey, dear friend, is all theory,  
And green is life's golden tree.

We are presumed to have the power and are expected to do what is "right" with liquidity, with the structure and level of interest rates, with the supply of money, with -- well, you name it since someone is almost certain to have advised us to devote exclusive attention to it or to ignore it.

The second problem is What may reasonably be expected of the practitioner in view of the current status of theory? You appreciate, of course, that the answer of a responsible practitioner may differ a bit from that of the observer. Some twenty years ago, as observer, I criticized Sir John Clapham for his defense of the management of the Bank of England during an interval in the Nineteenth Century. Sir John had written: "Fairness to the much criticized Court of the late thirties and early forties makes it necessary to say that most of the advice that it got, or might have got, from economists, statesmen, or the outside business world was likely to be crude, contradictory, or as tentative as its own policies." I said: "It obviously is unreasonable to judge policies of, say, 1839, by standards that would be applied to current policies; but is it unreasonable to judge them with reference to the best thought that had been developed by 1839?" My answer was implied so clearly that I did not put it down. But there was a gaping flaw in my reasoning. How is the mere practitioner to determine which, among the wide variety, is the best thought of his contemporaries? It may be that the change in my answer from no to yes as to what is unreasonable is but another illustration of the "strange juices that the wine-press of responsibility squeezes from our veins."

I must confess that as I have lived with this problem, studying as much of the literature as time allows, I am tempted, on those occasions when the mind goes stale, to say a plague on all your theories. But those are only momentary lapses. Deep down, I know that I do not mean it. I mention such frustration only to remind you that practitioners are not above occasional yearning for nirvana, where accumulated wisdom is adequate to assure perfection. It is only some observers, however, who already claim nirvana citizenship.

What really disturbs me is the frequent pretense to knowledge and comprehension far beyond what is justified at the present time. The simple truth is that no one comprehends enough to be an expert in central banking. We have no controlled experiments. The observer who deals with virtual movements, as though he knew exactly what would have happened if something else had been done, is simply naive.

This is not a counsel of despair but of patience. Central banking is an infant as human institutions go. We know precious little, have almost everything to learn. As Professor Culbertson wrote last month, "monetary theory . . . is in a terribly unsatisfactory condition." But our only hope is to learn more as rapidly as we can.

My task, as practitioner, is to learn and modify as we go along -- inspired by the builders of the great cathedrals who constructed magnificent edifices that differed from the presumed blueprints of the original architects. What makes the whole business fascinating -- to say nothing of being tolerable -- is a feeling of participation in an important dynamic process rather than dedication to a foregone or final result.

These are among the experiences that have convinced me that a practitioner must maintain an open mind. By this I do not mean a mind that is forever convinced by the last argument it has heard. Such a mind is not open but empty. An open mind, rather, is one with convictions whose strength arises from the intellectual compulsion of the arguments on which they are based and on the amount and depth of experience with which they have been tested. Some opinions should be held only lightly; others should be held with firm conviction. An open mind recognizes human fallibility and has a genuine impulse and willingness to expose all its opinions to new evidence and new arguments and a correlative determination to change always and only as new evidence dictates.

Recognition of one's own fallibility implies a tolerance for the ideas of others. It is a mark of immaturity to harbor "the old conceit of being wiser than posterity -- wiser than those who will have had more experience," as Jeremy Bentham phrased it.

This attitude has particular application for a mortal central banker who heads an institution that is chartered in perpetuity. Obviously, he is and must be responsible for everything that his institution does. But he should not pretend to be the sole source of all truth. Instead, his institution can discharge its obligations fully only if he develops and maintains a professionally competent, responsible, enthusiastic staff with integrity and freedom of mind.

I move now to a problem of communication. How does one inform the public with respect to policy and how does he issue directives to those who execute policy? Let me state at the outset that there is no disagreement in principle between observers and practitioners as to the desirability of a maximum of lucidity in communications. There is, however, a significant difference of opinion as to how much precision is possible.

I have struggled with this problem both as observer and as practitioner. As observer I desired precise and detailed communications so that I could evaluate accurately, in my own view, both policy and execution. I must confess that I was impatient that verbal information was not expressed in terms that could be programmed into our contemporary mental computers.

As practitioner I find that precise programming must ignore the unexpected and that it is the unexpected that occurs almost constantly in details and occasionally in matters of major import.

Perhaps I can illustrate what I have in mind from an entirely different field. I remember discussing the problem with Robert V. Roosa, currently Under Secretary of the Treasury for Monetary Affairs, when he was managing the Trading Desk at the Federal Reserve Bank of New York.

He told me of an experience when he was on the staff of General Omar Bradley during the Second World War. After a particular briefing session, toward the end of the Battle of the Bulge at the beginning of March 1945, Bradley issued a General Order to the Third Army that read substantially as follows:

Conduct an aggressive defense, maintaining contact with the enemy.

Over the first 48 hours that this General Order was in effect, the Third Army advanced 48 miles!

Obviously, the results were not those that would have occurred had the General Order been more specific: Had it read, say, "Retreat to a specified position" or "Hold on a specified line." Yet everyone agreed that the field commanders had carried out the intent of the Order; and, indeed, the advance was a notable achievement.

It would seem possible that the General Order was based on inadequate intelligence. It resulted in advance rather than in retreat, however, because the field commanders comprehended the general strategy, of which the General Order was a part. What became clear, as the fighting developed, was the importance of the adjective "aggressive" and the clause ". . . maintaining contact with the enemy," relative to the noun "defense." The enemy happened to be retreating, rather than advancing, as some of the intelligence had seemed to indicate.

Please do not misunderstand me. I heartily endorse the view that we should strive for as much precision as possible. But I think it would be a serious and possibly eventually a fatal mistake to assume that we know and understand more about the functioning of our economic system than we in fact know and understand. We should not give precise directions based on assumptions that may not correspond with reality as it develops.

In the field of Federal Reserve policy it is possible, of course, to give very precise directives to the Manager of the open market account. It must be recognized that such directives would have to be couched in terms that the Manager can in fact execute. They would have to be written in terms of the amount and issues of Government securities to be bought or sold, regardless of what happens to yields, or in terms of yields, without regard to what happens to the portfolio. They cannot be written precisely in terms of both -- at the present state of our knowledge. It is an elementary error to suppose that they can be written precisely in terms of the supply of money, however defined, or in terms of some reserve total, be it total reserves, excess reserves, free reserves, borrowed reserves, or whatever, or in terms of the liquidity of the economy -- whatever that may mean. The reason is that each of these magnitudes is influenced by factors over which the Manager has no immediate or direct control and the present state of our knowledge is insufficient to predict the behavior of these other factors with sufficient accuracy to make appropriate allowances for changes in them.

I confess that I have on occasion couched a directive -- or voted for a directive couched -- in inappropriate terms. But this always has been with the knowledge that the Manager was present to hear all the discussion which led to the formulation of the directive. I participate in rotation in the development of the day-to-day program of action designed to carry out the directive of the Federal Open Market Committee. I recall occasions when, though the intent of the Committee was clear to any veteran who had attended the meeting, the directive had not been phrased with skill. Under these circumstances, the daily program is designed to carry out the intent of the Committee, not the precise wording of the directive. In this connection it should be remembered that each member of the Committee receives a daily report

of intended action and that a special meeting could be arranged at once if there were questions as to misinterpretation.

As one who has spent many man years trying to understand the functioning of central banks in the belief that it is the only way in which we can learn from history so as to improve our performance, I admit that interpretation would be easier and more useful if every directive were straightforward and precise. I agree that maximum effort should be devoted to achieving this result. At the same time I would emphasize the inherent difficulties in our present state of knowledge and also that the practitioner is necessarily a man of action, more interested in getting on with the job than in creating a record that is easy to follow.

The problems of relating principles to directives to operations is not unique to central banking. General von Clausewitz had this to say about it in his PRINCIPLES OF WAR: "The conduct of war resembles the workings of an intricate machine with tremendous friction, so that combinations which are easily planned on paper can be executed only with great effort." Speaking from experience, I am tempted to paraphrase another Clausewitz dictum: "The results on which we count are never as precise as is imagined by someone who has not carefully observed a money market and become used to it."

If, now, you force me to squeeze my confession into that ball that T. S. Eliot talked about, I would answer by violating my commitment to Professor Walker and quoting Robert Frost:

The Road Not Taken

Two roads diverged in a yellow wood,  
And sorry I could not travel both  
And be one traveler, long I stood  
And looked down one as far as I could  
To where it bent in the undergrowth;

Then took the other, as just as fair,  
And having perhaps the better claim,  
Because it was grassy and wanted wear;  
Though as for that the passing there  
Had worn them really about the same,

And both that morning equally lay  
In leaves no step had trodden black.  
Oh, I kept the first for another day!  
Yet knowing how way leads on to way,  
I doubted if I should ever come back.

I shall be telling this with a sigh  
Somewhere ages and ages hence:  
Two roads diverged in a wood, and I --  
I took the one less traveled by,  
And that has made all the difference.

To this I would add only what Mephistopheles told Faust:

Du bleibst doch immer was du bist. <sup>3/</sup>

If you trust my memory, I will conclude this confession with a thought that Myron Watkins expressed in concluding a course in Labor Problems just forty years ago: "Visionaries and cynics alike are unsafe guides on society's great adventure." The world in which we live never quite measures up to the world of which we dream. This does not mean either that we should cease to live or that we should give up our dreams; but rather that we should strive constantly both to enrich our vision and to improve our performance.

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<sup>3/</sup> 1. 1809:

You will ever remain what you really are.