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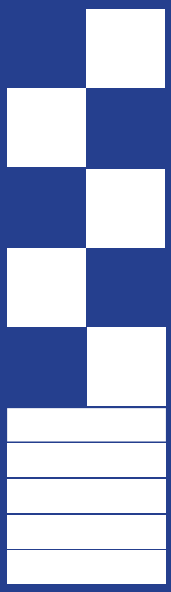
Creativity: Process and Personality

Larry Gross



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CREATIVITY

Process and Personality

A MEDIASTUDIES.PRESS PUBLIC DOMAIN EDITION

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Contents

Chapter VI: David C. McClelland: The Need to Achieve

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A large portion of the professional research performed by David McClelland has dealt with the nature of human motivation, and the achievement motive in particular. Many of his numerous papers, and five of the six books he has written, edited, and collaborated on, are concerned with questions of the origins and expression of human needs and motives.

David McClelland is professor of psychology and chairman of the Department of Social Relations at Harvard University. His many research activities have been complemented by a willingness to participate in administrative and advisory capacities in such bodies as the Ford Foundation, the Fulbright Advisory Panel, the Social Science Research Council, and the National Institute of Mental Health. The extent of this participation, greater than for any of the other subjects, indicates a certain consciousness or acceptance of the social responsibilities of his theoretical life that is an important characteristic of his personality. I think it is clear that the motive is not, consciously, a desire for power. I think we will see that it is rather an outgrowth of certain personal, perhaps even religious traits. A more important example of this is the fact that during the current year (1963–64) he is attempting to apply his theory to the task of improving society, by attempting to actually stimulate the need for achievement in the populations of underdeveloped nations.

The interview, 3 hours in length, took place August 24th, 1963, at the Department of Social Relations, Harvard University.

Growing Up

"I was brought up really as prepared for a career in education." David McClelland was the son of the President of a Methodist women's college. His mother was an educated woman and very much culture oriented, although non-academic. His uncle was at one

time President of the University of Pennsylvania. The influence of the academic environment was an important one in molding his early interests. Another important influence was his paternal grandfather, a Scottish immigrant who had been a judge, and had gone far in Democratic politics, at one time speaker of the New York Senate, and a friend of Theodore Roosevelt.

"My general family background was one of intellectual, religious orientation, combined with a good deal of strictness. There were codes of what we could do and what we couldn't do." There were five children. McClelland had an older sister and brother and two younger sisters. His parents put a great deal of pressure on his older sister to follow an academic, professional career. "My older brother had fights with my parents over school work. I didn't want to get into this kind of a battle." Besides the fact that he was a younger child, he was also more protected by his parents because of his physical condition. At an early age he had severe pneumonia, after which his parents considered him "a delicate child. They kept me out of school for a few years, and I was taught by my mother." Only later, when his father became president of the college and they moved from New York State, where he was born, to Illinois, did he enter public school.

Because of his mother's teaching, when he entered the third grade in Ohio, he "was way ahead of them, and that's the way it was all the way through graduate school. School work was always easy, and I enjoyed annoying the teachers by knowing things they didn't know."

If the school was not a place in which he was intellectually stimulated to a great extent, this was largely due to the effect of the environment of the college his father headed. The teachers he remembers as being important were in the college, two in particular. These were professors of language, Greek and German. Upon graduating high school a year early, he spent a year before entering college improving his Latin and studying German and Greek with these teachers.

McClelland went to Wesleyan University, his father's alma mater (where, in fact, he studied with many of his father's teachers), intending to pursue his linguistic studies. He now reads six languages. It was only later that he fell under the influence of a professor of psychology and decided on this as his field.

Besides language McClelland's other major intellectual interest was in chess. His fancy was caught at an early age by the imaginative possibilities of these problems. "My first publication, at the age of 12 or so, was a chess problem." During his high school years chess was one of his major interests and he published many chess problems, although he was never as interested, or as proficient in the actual playing of the game. "I think I participated in some regional tournaments, in which I never did very well." The fascination was in the problem-solving aspects, and the more imaginative and unconventional type of "fairy chess."

McClelland was certainly not a social isolate. He had friends, and participated in social activities. He acted a good deal, playing lead roles in many high school plays. But there was an alternation of periods of active social life, and of withdrawal into isolation and intellectual preoccupation with chess, languages, writing, and so on. "I would suddenly have enough (social life) and go off by myself for a while and do other things." At this time he even wrote a play in Latin.

"Our high school was a big one, but I had, I realize now, a rather small circle of friends. All from bourgeois families, and all later moved away from the town, Jacksonville, and have successful careers in the city, elsewhere."

At Wesleyan he began studying languages, continuing his previous interest. His older sister had also pursued a career in languages, in French. But as a sophomore he "took a course in introductory psychology, from John McGeoch, who was a very impressive man. His passion was psychology as a science, and in addition he was, I thought, a deeply educated man. He converted me to psychology, as a subject in which I really wanted to do some research. And I very soon decided, looking back on it, with no hesitation, that I wanted to be a psychologist. Started doing research almost immediately. He took a great interest in students, and in me in particular, and greatly encouraged me to go on in graduate study in psychology. He was known by psychologists as a person who was interested in paired associate learning and so on, but he had much wider and deeper humanistic interests. I was influenced by him in my choice of research problems and worked, really, right up through the Ph.D. on problems in learning and memory of the old-fashioned sort. The last two years of college were ones of increasing specialization. My horizons had been broadened before college, more than in college. Spent a lot of time studying rather narrow problems in human learning. However, in my senior year, I did two theses, one in learning and the other in social planning. I had been in a Friends Service Camp that summer, and had studied the TVA. I wrote a thesis on this under the one other teacher who influenced me there, namely Sigmund Neumann. He introduced me to what sociology I knew about, although he was more political sociology. I probably always looked down on sociology, till much later. [Another important professor was a Quaker, as were several classmates] and I decided that the Quaker religion was one I could stand much more than the Methodist Church in which I had been brought up. I had sort of revolted against Methodism, and this seemed a more congenial and less authoritarian religion. I didn't give it up wholly, as did most of my generation, but converted into a more radical form. I also met my future wife in that work camp, and we were married right after my senior year. By the age of 21 I was already married and well on my way towards the Ph.D."

"From Wesleyan I went to the University of Missouri, because McGeoch had come from there himself, and he wanted me to go study with one of his former students (Melton) for at least a year. A great deal of my professional knowledge was acquired at

Wesleyan and at Missouri, where I got a Masters in one year. And then went on to Yale, where Melton had been at graduate school. And I felt, as often in my academic career, that by the time I got to Yale, I knew practically everything that I would have to learn for my Ph.D. having learned it earlier; so that my two years there were something of an anticlimax. I didn't broaden out to learn very much of anything, my idea was to get my degree as fast as possible and get out. So I chose a rather easy problem for my thesis, and did it all in two years. My teachers at Yale had nothing like the influence of McGeoch or Melton. I worked under Hovland, whom I never got close to. I think Hull had probably the greatest influence on me, although, really in a negative way. I admired very much his care and precision, and his views about measuring, operationalizing rather subtle things. His point was, almost anybody could talk a good game in psychology, but this wasn't science. He made a great impression, not so much for what he did, but for his passion for science and hard work. My advanced graduate training was more in the nature of specialization than it was broadening; that had come much earlier. A fellow student there was Charles Osgood, but we hardly saw each other. He was known as a social psychologist, and we looked down on them. Oddly, many of his interests now are close to mine."

From Yale McClelland returned to Wesleyan, still working on learning problems of the sort he had begun under McGeoch. "The biggest change in my research interests occurred quite by accident. During the war, as a conscientious objector, I took a job with the Friends Service Committee in Philadelphia, administering one of their departments. (And I have never since been uninvolved with administrative duties of one sort or another.) While there I taught for a year at Bryn Mawr, and quite by accident I was elected to teach the courses in abnormal psychology and personality, which I really knew nothing about. I inherited MacKinnon's courses and also his office and his library. And, in preparation for the courses, I read through his library on personality. I had never even read Freud. And I have been working in personality ever since."

After the war he returned once more to Wesleyan, where by now he was working in personality. He also taught in a program initiated by Nathan Pusey, now president of Harvard, then of Wesleyan, in which every faculty member taught a section of a general humanities course. McClelland, with his knowledge of Greek and Latin, was well prepared for this venture, which he enjoyed greatly and found very stimulating. "I spent large sections of my time with non-psychologists, which I really prefer."

But aside from this brief excursion, the remainder of his professional research and teaching has been in psychology, to which he devotes time and effort in a manner reminiscent of Hull. "I have never been able to do anything that I start doing badly, without feeling badly about it. So I have always been working overtime, Sundays, weekends, and never really have taken much time off." This dedication has not prevented him from participating in administrative and advisory duties. "I don't feel really that I have

been in an ivory tower, but have always been coming out into life and coming back to the ivory tower. Which is still true today. In my year off, coming up, I will be working with governments on the problems of economic development, training in motivation, that might lead to economic development."

As opposed to Simon and Rokeach, and in a way to Maslow, we cannot identify as yet in McClelland the point at which he formulated a paradigmatic question which was to be the unifying theme of his later work. He chose psychology under McGeoch's influence, and worked for years in the framework of McGeoch and Melton. The change to personality as an area of inquiry came about accidentally, without any conscious change of belief system or framework. We will find, in the following, that he never did arrive at such a paradigm around which he recentered his view of psychology. His major significant recentering was more in choosing a specific area, a specific question, which became paradigmatic in the process of a very thorough following out of all its implications, without ever causing a radical restructuring of the science.

Motivation and Personality

"I don't know what to say about achievement motivation; it's very difficult for me to separate research interest in measuring achievement motivation from my own motives. It may be that I have developed more n-ach by studying it so long and so hard. I think initially, and this is still really true, in terms of my subjective impression of what I was interested in, I was really attracted by the puzzle characteristics of various things. It goes way back to setting up chess problems. I like to find out the key that explains something, so that I understand it better. I think I have a certain amount of n-ach. I always think of that as my father's side of me."

Here McClelland refers to what he considers an important aspect of his personality. His father was an intellectual certainly, but not in the deep, intuitive sense that his mother was. His father was more a worldly, mediating type. His mother was a profoundly cultural intellectual in an imaginative, original way. And McClelland sees here two major facets of his personality. His mother represents what we might call the primary process aspect of his creative personality, the intuitive, unstructured, fanciful thinking: his father the secondary, reality principle, processes of his life and work. The maternal side provides the interest in imagination and unstructured thought, his interest, say, in fantasy; the paternal side the desire to follow up these problems, to do research—in the same example, the work on coding and studying achievement-oriented fantasies. The paternal side is also seen in the administrative activities; his father, we remember, was a college president. So, while always somehow favoring the maternal aspect, he has realized the need to work on both levels, to achieve a synthesis, for neither alone is sufficient.

"Sense of destiny is a rather strong term for the way I feel. I have always felt very strongly about the importance of psychology, and the importance of developing better psychologists. I have a certain crusader's zeal about trying to recruit really good people into psychology." While still in college he was quite disturbed, as was McGeoch, by the fact that a very small number of the best students at Wesleyan went into psychology. He realized that, "unless more students, and the best that were around, went into psychology, it could never become really good." His missionary interests in this area are a contributing factor, I believe, to his willingness to participate in such committees as the Fulbright Advisory Panel on Psychology and the SSRC Advisory Committee on Fellowship Selection Techniques; as well as to assume the chairmanship of his department. It also relates, I feel, to his professional work on achievement motivation; in particular on the identification of creative talent, as in his book *Talent and Society* (1958).

"I have enjoyed being right about things in the sense that I have tended to follow a fairly offbeat path in psychology, and have done things that seemed a little crazy when I start them, and I rather like that. If I take a gamble in guessing that the level of n-ach in children's readers is going to be related to economic development, (and to non-psychologists that looks like a pretty absurd gamble, and even to conservative psychologists), and I invested five years of my life into getting the stories and coding them before I knew if it was going to pay off, and I was very nervous about it. But I can't honestly say I was really surprised when it did. You have to be a pretty good psychologist so you can know how something will turn out before you actually do it, and all the technique is so you can show the world something you already know is so. I get a lot of satisfaction in proving intuitively right in a gamble, I don't know whether that is achievement satisfaction." One part of this, I think, might be the satisfaction of carrying out in experimental form that would express the paternal side of his personality an idea which was intuitively correct from his maternal side. Also, in a way, doing what Hull would consider acceptable scientific research, on problems that would seem to be outside the boundaries of this science.

"I think I am a person who defines his ideas by rejecting other ideas. I reject the know-nothing school of behaviorism, Skinnerism experimental reductionism. I like to think I keep their precision, but I think they are working on trivial problems. On the other hand, I think I am clearly in opposition to the humanistic psychologists who like to talk in big global terms, and fear to get tied down to anything actual for fear that that will destroy their beautiful dreams. So I am in a funny position. I guess I have friends in both camps, but they both think I am a little peculiar. I can get along with Dorothy Lee, she likes me, but doesn't understand why I like numbers." He has a strategy for avoiding getting enmeshed in the organizational mechanisms of the APA which is relevant to this point. He has never joined any section of the association except the experimental psychology group. "I know those fellows will never elect me to any office."

"There is some enjoyment certainly of being an iconoclast, differing with most psychologists. Kind of refusing to get caught up in traditional ways of thinking about things. I enjoy controversy, I have a skill in debate; it isn't for serious [*sic*]. You don't decide truth by who is the most fluent speaker. I am often in opposition because it clears up, and clarifies your thoughts by knocking other people down, and other people's ideas, it helps define your own position. But my own standards have always been stricter than the standards of outside people."

"I have never been terribly interested in what other people think of my work. That's putting it mildly, I have never been the slightest bit interested in what other people think of my work. From the time I was 8 years old down to the present I have always wanted to solve problems for myself, and I have always been pursuing my own interests. I don't require the stimulation that some people say they need from their colleagues, I think that is overrated. I am always able to work things out on my own."

"My judgment has always been independent in the sense that I have always gone my own way, and I can't be pressured into changing my mind when I think I am right. On the other hand, I think that I must be socially very sensitive to what people are thinking. For example, I have always been aware of the fact, and it has annoyed me, that while I can keep on tune fairly well by myself, I can't sing parts in music. When other people are singing other notes I tend to deviate in their direction. So I guess you can't call that independence exactly, completely. I think I would say my differing from other people is more reluctant and deliberate, though firm, than defiant. There has been an element of defiance too, I suppose, in my attitudes towards psychology, but it's an intellectual sort of thing." Here too, the impression I received was that he felt that, in his terms, the maternal, imaginative side was independent; the paternal side, both in selection of problem areas within which the imagination is expressed, and in the systematization of ideas, is less independent and iconoclastic.

"Self-actualization? I don't know what it means too much. I have always been quite satisfied with my personal life, and very fortunate. I made a happy and successful marriage very young, so that I missed a lot of storm and stress on the security side, commonly associated with starting a family and settling down. I was always kind of a favorite child, my parents were less critical of me. I never really had any real problems in security. I belong, since my marriage, to the Quaker community and especially to my wife's family." This is a large, extended family of Philadelphia Quakers, living in close proximity, with strong filial ties. McClelland felt an immediate attraction and emotional attachment, especially as he was rebelling then against his own parents. He feels very close to his adopted family and religion. "I feel closer to my brothers- and sisters-in-law than to my own brother and sisters." In a sense, even in his professional life, McClelland has always been part of a community. As a child, he had felt close to the academic community of his father's college. Wesleyan was very much a small, warm community,

in fact it was his father's alma mater; and he later returned there to teach. Going to Harvard was a change for he had always planned to teach in a small college (and for that reason is still a bit unhappy at Harvard); but he had previously spent a year at Harvard, it wasn't a strange environment. We can see this even in his choice of graduate schools. He went to Missouri where McGeoch had been to study with a student and associate of his first teacher, and then to Yale where Melton had studied. He seems to have a strong sense of community (in Paul Goodman's sense) which is reflected in his social interest.

"Power needs. I have never felt that I had any, in fact, I felt rather the reverse. Power situations I have rather avoided. They don't bother me, I am not upset if I have to tell a faculty member that he can't have the raise he wants, or some research money, and I tell him. But I can honestly say I haven't been very much concerned with it. It seemed paradoxical to me that a person who cares so little, and I think it's really true, that I don't care for positions of power, that I should be asked to do it. I have never aspired consciously at any rate to any of these positions. I have always liked to get out of them as soon as I can, because they usually make me do things that interfere with things that I really would rather do. It's just that it bores me."

"I have always hated the word creativity. I don't know what it means, and I don't know what self-actualization means. Does it mean am I happy? The answer is yes, most of the time. Does it mean have I done things that I am glad to have done? Yes. I have been very fortunate, in my wife and children, family and friends, had lots of support from society. That just means that I have been living a good life, and been able to do the things I am trained to do. If you mean having ideas that other people don't have, I have always had my share of them. I think I get that kind of originality from my mother. As opposed to the more conventional kind that is more like my father, which might be related to writing rather than to ideas... There were no organizational pressures on me to publish. I have always felt that business has been greatly exaggerated. I never felt I was under the slightest pressure to publish. People once asked me why I wrote what I did, and the only answer is that I couldn't help it. In fact, at one time, it was embarrassing because I had published so much more than my colleagues."

"Peak experience, doesn't bring very much to mind, except when I have finally worked out a chess problem so that it fits together, after hours and hours of playing around with pieces; and it's neat, it works, and there is no sloppiness left over. An analogous peak experience would come, I suppose, when I have put in a lot of time on data analysis, let's say coding those children's stories, and it's a significant correlation. That's a very exciting thing. I had put a lot of time into it, I even liked to run the correlations myself, I suppose because I get the fun of seeing it happen right there. There is a lot of excitement in research projects, setting them up, organizing them. I like that kind of thing, and I am able to sustain enthusiasm over a long period of time."

"The third type of experience of this kind, I have mostly had abroad, the more sensuous types of pleasure from sights and scenes and smells and foods and sunsets and that sort of thing. I think I have had much more often in Europe, those kinds. Particularly the year I spent in Italy. [This was 1958–59, while writing *The Achieving Society*, and in the Preface he wrote, 'Italy (provided) the sense of perspective and of leisure, that in the end made the book possible' (1961, p. xii).] It seems that I have to get out of my puritanical, achievement oriented framework and culture in order to have these feelings. I have seldom had them here, although I did get the same kind of feeling from mountain climbing. It's a real effort to climb a mountain in the Rockies; you have to train for weeks to prepare for scaling the top. And to get there is a definite peak experience, literally."

"As far as life goals are concerned, I think they have been fulfilled far beyond what I really expected. I remember a session as an undergraduate, asking all the people present what they thought they would be earning 10 years from then, and what their aspirations were. And most of them were way above mine, in terms of what they expected to be and to earn. My aspirations were really quite simple, and I think they were honestly simple. I really wanted to teach in a small college. I am constantly surprised at the extent to which my life goals have been much more realized than I expected. I don't day-dream about things in the sense of tying things very closely to reality. I don't day-dream much except about things I can do, or about what can in effect be done. I think that my only wish at the present time is that I didn't have so much to do... During my sabbatical next year, I am planning to work on this economic growth thing, which I feel I should do. But, there is a chance I won't get the money I need. I will go to Europe even if I don't get it, but I won't be too upset if I can't do that work, there are so many other things I want to do."

The Achievement Motive

In tracing David McClelland's professional development we have noted the lack of a basic paradigmatic question acting as the pivot of a novel conceptualization of psychology central to his thought and research. In this he differs from all of our previous subjects. The problem areas were chosen either by the teachers he was close to, or, later, by the accident of having to broaden his scope in psychology. His first book, in 1951, was entitled *Personality* (1951), and is a text-book type of exposition in which he mainly applied the methods of thinking acquired in a training that was divorced from any real concern with personality to this new field. The majority of his subsequent work has dealt, in one way or another, with the question of achievement motivation. While the posing of the question clearly does not fit our definition (Chap. I, above) in that it did not involve the rejection of belief systems, and their replacement with new ones deriving from a paradigmatic question; I think we shall see that in the working out of the implications of

the problem, initiated almost accidentally, the question took on paradigmatic qualities and resulted in creative conceptual and methodological innovations. It never reached the point of being a focus for radical recentering. So while it is not of the highest order of creativity, as we defined it, I think it will be seen, on a less global level of concern, and in an unchronological sequence (in terms of our definition), to fit our concept of the creative process.

"Work on achievement motivation, how did this get started? The way it all got started was almost accidental, as almost everything I have done seems to me to be accidental. It just happened. The specific thing that happened in this case, was I gave a cocktail party at my house in 1946 [shortly after returning to Wesleyan] to celebrate the 50th anniversary of the founding of the psychological laboratories at Wesleyan, and invited also a Captain at the Submarine base in New London, Connecticut. In the course of circulating, I stopped to talk to him, and he said, 'Why don't you do some work at our research laboratory?' I said, 'that's absurd, that's not my kind of work.' I was thinking of work on the relative effectiveness of various color flares and such. But he said that wasn't really what they were doing, and that he had some money for research. Then, it just happened that Jack Atkinson [an older, war veteran, student at Wesleyan and a close associate and co-worker of McClelland's. The first book on achievement motivation (1953) was in collaboration with Atkinson, among others, who is now a professor at the University of Michigan and has continued to work on this subject.] was talking to me, and he had not gotten very far along on his senior thesis, was due to graduate February 1st, and needed to earn some money before graduate school in September; and he also needed more time to work on his thesis. So, I called this Navy guy and asked him if he could help out. He said 'sure, we will work something out.' That was the beginning of the research on n-ach. There was a financial motive in starting it, and in finishing it. I always had about 6 or 8 projects going, this was one of them. There were quite a few others. In this case, we knew if we kept to pretty much the same things, we could continue to get this money. So this kept a series of students over the years working on essentially the same project. It began to get cumulative, because we had so many people working on it."

"Our first task was to get a method. We were interested in the effects of hunger on fantasy, but then we shifted quickly to n-ach. We chose n-ach because it was a variable that Sears had worked on (even though while at Yale I had never worked with him), and I had worked with it; we knew how to ego-involve people. We were simply interested in comparing the fantasies of people who were ego-involved with the fantasies of people who were not ego-involved."

"Well, that involves a number of variations of atmosphere, looking at the protocols and deciding how they differed from each other, and developing coding systems for discriminating between them. A very simple straightforward coding system for discriminating

between them. A very simple straightforward thing. Except that I was committed earlier to leaving the judge out of it as far as possible. I objected now, and I objected then to rating scales because they include so much of the judge's personality. Obviously this required a lot of refinement, a lot of creativity and originality in trying to discriminate the stories, between the two things. You could do it globally, by ratings, clinical impressions; but we were trying to define it more precisely. Well, this meant a long period of cut and try, and we repeated the experiments after we had the coding system, and changed coding definitions, threw out coding definitions because we couldn't get two judges to agree at 95% accuracy. It was a great task."

"Once we had a scoring scheme, we asked ourselves whether people who thought a lot about this behaved in different ways, so then we got an individual difference measure, and began correlating it with everything we could think of: Rorschachs, performance scores, and so on. Then we moved out and fanned out in all directions. That seems to be the next step."

"Another step was: well, how did people get that way? Are people with high n-ach different from people who don't have much of it? What about their family backgrounds? So we went and studied origins."

"Then we got interested in the relation of n-ach to different types of cultures, different types of societies. And that's how we moved out into the world. We wanted to ask, what are the people like in the world who have a lot of these characteristics? It seemed that they were the ones who played the entrepreneurial role. Is this just in the West, or is it in the Communist world too? Was it true 10,000 years ago? We were just following our nose in all directions. There wasn't any sort of concerted plan of attack, we sort of were answering questions as we went along that obviously seemed to need to be answered."

"That year I was at Harvard I read Max Weber for the first time. I read his book on the Protestant Ethic, which struck me as a really seminal book, full of interesting ideas. And I noticed the similarity, obviously, for the first time between the kind of person he was describing and the kind of person I'd been studying for 3 or 4 years. And, again, I don't think it took any great originality to notice the similarity. The words he used were almost the same. So then I made contact with this whole other tradition in sociological theory about how this class of entrepreneurs really created modern capitalism, and the spirit with which they went about it. From then on out it was a simple question of checking to see if this idea was right, and most of our ingenuity and efforts were directed to trying to find ways. And then, of course, it became clear that once we saw Weber's historical case, as a special instance of a much more general phenomena, namely high achievement motivation, we could find it in all different times and places around the world and in history. And we were forced to invent techniques of measuring n-ach in people who were dead, scoring popular literature, and so on. I would say that what is obviously different about this is that while many people might see the connection, there is a long

way from there to proving it. Most of my energy, obviously, has gone into an attempt to prove that, or subject to some kind of objective test to see whether it's correct and to what extent."

"The last stage, I am in now. Having demonstrated to my satisfaction that these waves of achievement concern for whatever reason, in various times and places, are associated with increased entrepreneurial activity and rapid economic growth. Then the other side of my interest comes to the fore. Mainly, if you really understand, if this really is a factor in economic growth, why can't you change it? Why can't you increase n-ach where people would like to have rapid economic growth? Obviously one of the major problems of our time is underdevelopment all over the world."

"It dawned on me that maybe we could develop n-ach. Well, here I have two obstacles to overcome. Namely my conviction that motives of this sort really were laid down in childhood, and that it's highly unlikely that you could do much to them in adults. And yet, again, necessity is the mother of invention, as is always the case in my life. Well, I can't do the research if I believe those convictions, so I can't believe them. I've got to find some way of changing motives in adults. And this brought me back to my earlier interests in learning anyway. I am now working in the field of adult learning, but with a whole new set of variables. [The reason for his abandoning of learning, was McClelland's realization that the variables dealt with in the McGeoch-type research, such as he had been doing, had been pretty well worked out.] These are new variables, which haven't been played out, motivational set, setting variables. Now I am involved with what I call change-research activity. How to create achieving societies. As an experimentalist, I don't really believe in a phenomenon until I can produce it in the laboratory. Now I want to get in on the ground floor in a country and do just that... So I will be traveling all over the world, trying to develop n-ach, in management training and so forth, and spur economic growth. In a way this is very grandiose, my feeling that I can change history in this way; sort of like Alexander the Great going out to conquer the world."

Before leaving the subject of the contentual [*sic*] nature of the research, I think it is relevant to quote from the preface to *The Achieving Society*:

> This book grew out of an attempt by a psychologist, trained in behavioral science methods, to isolate certain psychological factors and to demonstrate rigorously by quantitative methods that these factors are generally important in economic development. The scope of such an enterprise turned out to be truly alarming for one whose background in the social sciences was slight to begin with. It required specialized knowledge on everything from population problems, to coal imports in England from the 16th to the 19th century, to methods of computing rates of economic growth, to sources of children's books, to management practices in Russia, Italy and Mexico, to the pottery of Ancient Greece and pre-Incan Peru... in the search for the broadest possible test of the hypothesis that a particular psychological factor—the need for Achievement—is responsible for economic growth and decline... But how did I get involved in covering so much territory in the first place? Why risk being superficial? The answer lies in the general methodological approach of the book, which is in the tradition of comparative history, comparative economics or a psychology interested in generalizations that apply to all or most of the human species. In other words, the book attempts to answer general questions, not specific ones; it does not probe the particulars of the Industrial Revolution in England but examines the factors underlying that

> revolution which were common to other such waves of economic development in history... I am by profession a clinical psychologist... (and)... It is perhaps because I have spent time analyzing particular cases that I feel the need for generalizations and a comparative frame of reference... Though it is not my purpose to deal with (particular) cases, it is my hope that the generalizations established will help in the analysis of particular events in history, in exactly the same manner that the generalizations of a physicist help an engineer to design and build a bridge in a particular spot at a particular time (1961, pp. vii–viii).

I think we have here a clear, retrospective, systematic presentation of the aims of this work, which outlines the reasons for its forms and scope, even though we have been told that the development was not nearly so premeditated. This is a position somewhere between Rokeach and Simon on the one hand, for whom the following up of the implications of the initial problem proceeds in clearly planned and premeditated stages, with everything seen in the context of the whole, and Maslow on the other, whose research tends to be the following of an intuitive problem, without realizing the implications in terms of the whole until it is finished. (I might note, that I find no justification, either in the interview-data or his writing, for McClelland's self-description in the above passage as a clinical psychologist. The work on motivation does not, to my mind, constitute clinical psychology [notwithstanding its concern with personality.]) What light can McClelland throw on this work, besides the history of the ideas?

"I don't really think that what we did is terribly original, except in the technique, and the perseverance with which we followed certain ideas. I know people who have had 20 more original ideas than I have had, and I think that this is a simple idea, pursued to the ultimate ends of the quest of knowing what the achievement motive is all about. And, as I say, this was partly for financial motives as well as creativity. This is the active part of creativity. One-tenth inspiration, nine-tenths perspiration. One little idea, pursued in all directions, until it was thoroughly worked out." Yet it is with this "little idea" that McClelland now hopes to change history. A rather large oak tree has grown over the years, with many branches and off-shoots.

"The information came from everywhere. I have a very wide-searching technique for getting information. I read widely, in all kinds of literature, in 6 languages. I read everything. I try to explain to my students that if you're going to be a good psychologist, you never know where your ideas are going to come from, and you've got to cast a wide net, particularly if you are in the field of personality. I got the basic idea for coding the factisies [*sic*] of need-affiliation from some of the imagery of Shakespeare's Sonnets. My views on design and execution I got from the Yale tradition."

"I can't say too much about all of these [Chap. II, IV: A–D] except that all of these things occur. My feelings about it, that it is a strange mixture of ideas that pop into my head as important, and get sorted away someplace as important, and somehow pop out again at a moment when they are useful. And I never know where I pick up these ideas, but I have a great selecting mechanism. That is, I scan a large amount of information, but unlike some people who really get loaded with material, I throw most of it out. I

can read a whole book and retain only one idea. So that my mind isn't too cluttered up; I have a great way of throwing things away."

"The ideas come in when they are useful to me, thought is somehow always connected with action. Almost any research problem has had some practical element in it to be solved. Like a graduate student need, or ability. A lot of my research interests have been dictated by the particular needs, and the special knowledge and abilities, or particular individuals who walk into my office at a particular time. The instance with Atkinson is only one of many."

"I think of myself as intuitive and experimental rather than rational and logical. I am irritated, and may have gotten this from being associated with Hull to a certain extent, this business of mathematical-deductive, logical systems. It all seems very pretty to me, but that this is a kind of gamesmanship, and not really related to the real world. I am impatient with logical, I always hated logic. I am very devoted to reason, to careful reasoned argument; but that seems different to me from Euclidian geometry and stuff like that."

"Typically, the side of chess that I was interested in was fairy chess, which is a kind of chess where you break all the rules of the game, invent new pieces, new moves, work with three-dimensional boards, boards that go around in a circle, and so on. I talked to Herb Simon [a good contrast here!] about this, and he had never even heard of fairy chess! I think his mind is a more logical and orderly one, probably, than mine is. Mine would be more interested in new moves, new types of games, rather than the other. But there is a mixture here. On the other hand, I love tables. I spend hours reading statistical abstracts, where things are laid out neatly, orderly. That's not the same thing as logic. I hate to be forced to a conclusion by logic; I don't mind being forced to a conclusion by the data."

"The achievement work, I was just doing whatever came up next. I was following my nose. I never made any logical, sensible, theoretical decisions that I remember. The steps all seemed kind of natural to me. Although later on Paul Lazarsfeld wrote up a great thing about how systematic our search into motivation had been. He utterly astonished me! I heard him lecture on this, and it was so orderly and rational what we had done, and I hadn't the slightest idea. That's what I was doing, but I certainly didn't go about it that way, it turned out to be that. I would also be, I think, a combination, again, of my mother—fantasy, the achievement motive stories, humanistic feelings, etc., and my father—careful, rigorous work, Hull experimentation. These must be combined, not opposed."

"Collaborating for me has been a very special kind, I guess. I have always worked with students. I suspect that this has meant, not that these students don't have ideas of their own, they do; but it still means that they have to work within my framework. That's clear. I can't imagine myself collaborating with Fred Skinner, even though I respect him,

or Harry Murray, who is closer, but insists on using judge's rating scales. There are basic assumptions in collaboration, or you can't work together. And my students obviously share these assumptions or they wouldn't be working with me. The collaboration has almost always been one where I lay out the kind of general nature of the problem, and help most at two points. One, especially in fantasy research, I help critically at the point of defining differences. That is, developing coding systems. Which is to my way of thinking extremely creative, the most creative thing I can do, what I do best in psychology. I have done this dozens of times; am able to do it at the important middle level of generality, not too picayune, and not too global. It's convenient for me to do it. The students collect the protocols and I take them home and work out the variables. They also work on this, and we go over it together. They nearly always run the experiments, collect the data. And then, the amount of data analysis that I do varies somewhat, but I have a real passion for doing data analysis, preparing graphs and tables; and very nearly always I will write up the paper also. So that most of the papers that have my name along with several others have been written by me. And the students have worked with me in designing the experiment, and they executed it. In a way the nature of my collaborations has changed over the years. I haven't changed, the students have. Students are much less interested, or willing to collaborate with me now that I have reached a certain standing, in the way they were 15 years ago. Now they feel that in the world's eyes, though not in mine, if a paper appears with my name along with that of a student, it will be thought that it is really my work, my ideas. Which isn't true, and I don't think so; but this feeling exists."

"Writing started out by being extraordinarily difficult for me. I wrote a paper as a graduate student which I had an awful lot of trouble with. I wrote it over eight times. I kept at it because of the things I wanted to say. I felt they were important, and people should know what the truth was, that I thought I knew. I had a certain compulsion to say things but very great difficulty in learning how to do it. Later, I don't know when, the process was so agonizing; to produce an article might take a solid year, and literally one hundred hours of work to get twenty pages. I slowly began to get a little better, but I had this 19th Century style. I blame my father for it, he had influenced me that way. He thought that Macauley and such had the only good style, and influenced me in developing this style. But at some point I just decided that I didn't talk as dully as I wrote, and in such an intricate, involuted way, because without seeing them in front of me, my sentences couldn't become so long and complicated. So I decided to try and dictate my first drafts, and started that with my first book, on personality. It took quite a while to learn to dictate, but I had had that administrative experience during the way, when I dictated memos and such. So I found that my spoken style was much clearer, simple and straightforward. Because my memory span is so poor I had to keep in mind what I said, and I couldn't do that if the sentence was too long. I still can't write on the

typewriter to this day. Although if I trick myself by not looking back over anything I've written, I can, otherwise the sentences get very long and complicated. Writing for me was simplified by having a secretary. Editing is very simple, once I have a first draft. Now I can produce an article of a non-technical nature in four hours."

David McClelland, I think we can say, started out accidentally on a problem in measuring fantasies, began without realizing to evolve a line of research and inquiry based around the general question of why do people have a need to achieve? This became, I think, a paradigmatic question with numerous significant and creative sub-problems. The questions, how can we measure n-ach? How does it affect fantasy? were the initial ones. Answering these led to the first major methodological innovation, McClelland's way of developing coding schemes to analyse fantasy material in a rigorous fashion. This, he says, "Is the most creative thing I do." The next question, what are they like, the people with high n-ach? led into many areas, most importantly it led to the question, what produces high n-ach? individually? culturally? The extension of the inquiry to social spheres was the second major creative leap. It was at this point that he encountered the Weber thesis. And by this point he had already evolved enough of a paradigmatic viewpoint in this work, so that he immediately interpreted Weber in terms of his system. He was the first, to my knowledge, to make the important leap of viewing the Weber thesis as a specific manifestation of a general, paradigmatic, phenomenon. A structural rather than a merely contentual [*sic*] understanding. And once more a methodological leap, for now he applies his coding methods to cultures, past and present, to demonstrate the general validity of the thesis that he shared with Weber. And then the third creative leap. Having slowly generated a paradigm which afforded a vantage point from which to view all of economic history, generalizing from his work with individuals, and from his establishment of the Weber-type thesis, he makes a conceptual and methodological jump in deciding to try and carry out the theory in practice, to create on a social scale the phenomena around which the theory was built. This is possibly his most novel creative innovation.

For this reason, although it is clear that his work doesn't exactly fit much of the first part of our definition, I think that it did in actuality, if unconsciously, evolve a paradigmatic view, and folllow up its significant implications, generating novel heuristics. The paradigm, especially in its final stage (although we can speculate on the influence of a radical Protestant family on an interest in achievement motivation), reflects a deep personal involvement with community, society and the social interest. The paradigm is really a general one only in its generation of a novel view of society, and social change. In the realm of psychology it did not effect a restructuring, and was never meant to. To do so would have been inconsistent at least with McClelland's conscious concept of the value of scientific work. To use the personal analogy once more, I would say that the paradigmatic aspects are expressive of his maternal side, the views on the nature

of science of the paternal, and they come together in the actual doing of science and imaginative inquiry. I will end this study by quoting McClelland's view of the role of psychology as a science, as distinct from his responsibilities as a member of a community and society.

"One thing that has bothered me, believing in science the way I do, is that people have been relatively indifferent to accumulating bodies of evidence of a commonsense sort. As opposed to the Great Man theory of psychology that it is easier to make a splash by being a Skinner or a Goldstein or somebody who has a distinctive view on personality or psychopathology. You get argued about, books written about you, you get taught about. Hall and Lindsey, in their book, talk about people with these points of view. About me they say, 'He is so eclectic that he isn't interesting to talk about.' Well, this kind of indifference doesn't bother me personally so much, but rather from the point of view of science. My view of psychology is that we should be accumulating information about important areas of personality. I was naive enough to think that the day of schools in psychology was over. But I have learned that I was wrong. Because I think it is much cheaper to argue about great big viewpoints, which really doesn't interest me very much. On the other hand, I am also not interested in the gathering of trivial detail for its own sake. There is that important middle level of relevance. My ultimate view of psychology was that it would be, eventually, like a textbook on physiology, with chapters on various subjects, and a lot of dope in it."

References

Adler, A. (1958). *What life should mean to you*. Alan Porter, Ed. Capricorn.

Anderson, H. H. (1959). Creativity in perspective. In H. H. Anderson (Ed.), *Creativity and Its cultivation* (pp. 236–268). Harper & Bros.

Ansbacher, H. L., & Ansbacher, R. R. (1956). *The individual psychology of Alfred Adler*. Basic Books.

Barnard, C. I. (1938). *The functions of the executive*. Harvard University Press.

Bruner, J. S. (1960). *The process of education*. Harvard University Press.

Bruner, J. S. (1962). *On knowing: Essays for the left hand*. Belknap Press of Harvard University Press.

Bruner, J. S., Goodnow, J. J., & Austin, G. A. (1956). *A study of thinking*. John Wiley & Sons.

Crutchfield, R. S. (1962). Conformity and creative thinking. In H. E. Gruber, G. Terrell, & M. Wertheimer (Eds.), *Contemporary approaches to creative thinking: A symposium held at the University of Colorado* (pp. 120–140). Atherton.

Getzels, J. W., & Jackson, P. W. (1962). *Creativity and intelligence: Explorations with gifted students.* Wiley.

Gross, B. (1964). *The managing of organizations: The administrative struggle*. Free Press.

Gross, L. (1973). Modes of communication and the acquisition of symbolic competence. In G. Gerbner, L. Gross, & W. H. Melody (Eds.), *Communication technology and social policy* (pp. 189–208). Wiley.

Hadamard, J. (1949). *An essay on the psychology of invention in the mathematical field.* Princeton University Press.

Hagen, E. E. (1962). *On the theory of social change*. Dorsey Press.

Hutchinson, E. D. (1949). *How to think creatively*. Abingdon Press.

Kubie, L. (1958). *The neurotic distortion of the creative process*. Noonday.

Kuhn, T. S. (1962). *The structure of scientific revolutions*. University of Chicago Press.

MacLeod, R. B. (1962). Retrospect and prospect. In H. E. Gruber, G. Terrell, & M. Wertheimer (Eds.), *Contemporary approaches to creative thinking: A symposium held at the University of Colorado* (pp. 175–212). New York: Atherton.
https://doi.org/10.1037/13117-006

Maslow, A. (1954). *Motivation and personality*. Harper & Brothers.

Maslow, A. H. (1936a). The role of dominance in the social and sexual behavior of infra-human primates: I. Observations at Vilas Park Zoo. *The Pedagogical Seminary and Journal of Genetic Psychology*, *48*(2), 261–277.
https://doi.org/10.1080/08856559.1936.10533730

Maslow, A. H. (1936b). The role of dominance in the social and sexual behavior of infra-human primates: III. A theory of sexual behavior of infra-human primates. *The Pedagogical Seminary and Journal of Genetic Psychology*, *48*(2), 310–338.
https://doi.org/10.1080/08856559.1936.105337

Maslow, A. H. (1936c). The role of dominance in the social and sexual behavior of infra-human primates: IV. The determination of hierarchy in pairs and in a group. *The Pedagogical Seminary and Journal of Genetic Psychology*, *49*(1), 161–198.
https://doi.org/10.1080/08856559.1936.10533757

Maslow, A. H. (1937). Personality and patterns of culture. In R. Stagner (Ed.), *Psychology of personality* (pp. 408–428). McGraw-Hill.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370–396. https://doi.org/10.1037/h0054346

Maslow, A. H. (1954). *Motivation and personality*. Harper & Bros.

Maslow, A. H. (1962a). *Toward a psychology of being*. Van Nostrand.

Maslow, A. H. (1962b). *Summer notes on social psychology of industry and management*. Non-linear Systems Inc.

Maslow, A. H., & Mittelman, B. (1941). *Principles of abnormal psychology*. Harpers.

McClelland, D. C. (1961). *The achieving society*. Van Nostrand

McClelland, D.C., Atkinson, J. W., Clark, R. A., and Lowell, E. L. (1953). *The achievement motive*. Appleton-Century-Crofts.

McClelland, D. C., Baldwin, A. L., Bronfenbrenner, U., & Strodtbeck, F. L. (1958). *Talent and society: New perspectives in the identification of talent.* Van Nostrand.

McLelland, D. C. (1951). *Personality*. William Sloane Associates.

Neisser, U. (1967). *Cognitive psychology*. Appleton-Century-Crofts.

Newell, A., Shaw, J. C., & Simon, H. A. (1958). Elements of a theory of human problem solving. *Psychological Review, 65*(3), 151–166. https://doi.org/10.1037/h0048495

Newell, A., Shaw, J. C., & Simon, H. A. (1962). The process of creative thinking. In H. Gruber, G. Terrell, & M. Wertheimer (Eds.), *Contemporary approaches to creative thinking: A symposium held at the University of Colorado* (pp. 63–119). Atherton Press. https://doi.org/10.1037/13117-003

Ridley, C. E., & Simon, H. A. (1938). *Measuring municipal activities: A survey of suggested criteria and reporting forms for appraising administration*. International City Managers' Association.

Rokeach, M. (1960). *The open and closed mind*. Basic Books.

Rokeach, M. (1962, February). In pursuit of the creative process [conference presentation]. The MacKenzie Symposium on Creative Organization, University of Chicago.

Rokeach, M. (1964). *The three Christs of Ypsilanti: A psychological study*. Knopf.

Simon, H. A. (1947). *Administrative behavior: A study of decision-making processes in administrative organization.* Macmillan.

Simon, H. A. (1957). *Administrative behavior: A study of decision-making processes in administrative organization* (2nd ed.). Macmillan.

Skinner, B. F. (1938). *The behavior of organisms: An experimental analysis.* Appleton-Century.

Skinner, B. F. (1948). *Walden two.* Macmillan.

Skinner, B. F. (1957). *Verbal behavior.* Appleton-Century-Crofts.

Skinner, B. F. (1959). *Cumulative record.* Appleton-Century-Crofts.

Skinner, B. F. (1960). Pigeons in a pelican. *American Psychologist, 15*(1), 28–37. https://doi.org/10.1037/h0045345

Smith, M. B., Bruner, J. S., & White, R. W. (1956). *Opinions and personality.* John Wiley & Sons.

Stein, M. I. (1963). A transactional approach to creativity. In C. W. Taylor & F. Barron (Eds.), *Scientific creativity: Its recognition and development* (pp. 217–227). John Wiley & Sons.

Wertheimer, M. (1959). *Productive thinking* (enlarged edition). Harper & Bros.