

Why Invent a Profession

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In the May-June 1955 issue of this Journal, Mr. Alvin Brown explained "How to invent a profession". The humor of this article was refreshing. But it touches only the fringe of a really fundamental human problem. I refer to the problem of why new professions are invented. Do we need new professions and, if so, why? Professions, like people, are born. They grow they contribute they become middle aged they get old. Rarely do they die. But frequently they show signs of old age.

The subject of "Why invent a profession" covers many of the problems from toddling to tottering in professional growth. It explains the advent of such new professions as Value Engineering, Value Analysis, Statistical Analysis, Operations Research, Mathematical Programming and Industrial Engineering. It explains the advent of older professions such as Electronic Engineering, Electrical Engineering, Civil Engineering and Naval Architecture as well as Law and Medicine.

The dynamics of the life of a profession start with a need. This need is frequently the result of the mental rigor mortis of people in existing professions. The old profession will fail to fill a need because it is newer than the profession. The needs of society change even as society itself changes.

Along comes a man with a creative spark and a less-calcified attitude. He sees a need and notes the gap between existing professions. He conceives a solution and his one per cent inspiration is done. He begins to supply the ninety-nine per cent perspiration required to satiate the need. This creative man deserves a good deal of credit because he is the "spark plug". He invents a profession to do a job. It works well for a time.

Then, when everyone is aware of the need, these ideas filter down to the working level. They eventually become entombed in text books and are preached to the next generation. This generation, on the average, is average. If there had been no wheel, they could not have invented the wheel. If there had been no language, they could not have invented a language. If there had been no electricity, they could not have discovered electricity. They don't invent they use. This relieves the new engineer because he couldn't re-invent the five basic machines. He can accept his inheritance. He can drink in the wisdom distilled from prior creative minds. If he is creative, he can create something new on the foundation of previous creations.

You cannot tell anyone how to invent a profession. Like all creative endeavors, only a few people are capable of good invention. These few don't need instruction. Con-

versely, all of the directions in the world won't help those who are not creative because you cannot teach people how to realize that a problem exists. The first symptom is a man banging his head against a problem. Soon he either learns to live with it or he sets out to change things. One tool for changing things is the invention of a new profession.

The crux of the discussion, therefore, is why not create within the old professions. Why invent a new profession? Why think up a new name? Why use new words? Because new words get old. Because old words are often spoken without clear thought behind them. Because a person has to think when he deals with a new term. New terms are used to denote a new facet of a problem. This is a tool used to fight the natural human tendency to enshrine the past. It is good to learn from yesterday but it is a grave error to worship it. So, knowing full-well that by tomorrow, today will be yesterday, the creative man sets out to right the wrong.

The creative engineer usually sets out to save some money. He is not really interested in the money for itself. Money is merely a convenient way of measuring. If he saves a dollar he is really saving a dollar's worth of human effort. This saving may reflect itself in a higher standard of living on a fuller, happier life. It will result in enhanced human value.

Time does not stand still. The process of aging goes on. The symptoms of advanced age are obvious in the older professions. Medicine and Law are good examples. By giving every sore thumb and broken toe nail a latin name, the medical student studies latin instead of how to cure diseases. A lawyer studies *res adjudicata* rather than the fundamentals of justice between humans. In short, the average professional man spends far too much time pawing over the dry bones of his profession when he should be thinking of ways to give it a blood transfusion.

When a creative individual brings forth a new idea he may integrate his approach into an old profession or he may decide to establish a new profession. In either case he should be embraced hospitably not derided or belittled. Every truly great man in history was considered radical because he was ahead of his time. But times change swiftly even if men do not.

As professional men, we should strive to keep our professions moving. We should neither deride nor fear new names, new languages or new ideas. If we must deride, then deride stagnation.

How to Invent a Profession

By Alvin Brown

Do you want to Do Things and Be Somebody? Do you want to Sublimate your knowledge and Rise Above the common level? Well, why not? You, too, can invent a profession. Just follow this blueprint:

1. Detect some phase of industrial operation that might be improved. This first step is easy. Industrial operators are human and have their share of human frailties. Moreover, they are usually anxious to improve their work, and therefore easily persuaded of their faults.

2. Attribute the fault to all industry. Don't say, "Some companies could reduce their material costs, or, Some companies don't fix the responsibility for economy. Speak of the "comparative neglect of materials problems in the past" and say that "the engineers typically expect the buyers not to bother them."¹ Obviously, a fault shared by everyone can't be cured by mere urging to do a better job. It will be recognized that something drastic is called for. This is the cornerstone for a new department of knowledge.

3. Invent a name. Here we reach a highly critical step. Semantics is the handmaiden of this undertaking, but the name in particular demands a delicate touch. Avoid unfamiliar words; rather, seek a new combination of familiar words. Thus, "operations" and "research" are common-place separately, but together they achieve an esoteric quality. "Research" is a very dynamic word. No one will suspect that they mean merely the thinking a man ought to do about his job. "Value analysis" hasn't quite the same force, but yet it is an intriguing junction of two otherwise familiar words. "Mathematical programming" implies a world revolving in the perfect order of the sidereal system.

4. Invent a language. Here you face a real test of your ingenuity. All your work will be wasted if you can't rise above the common language of industry; the facade of novelty can crumble at a touch of the familiar. Don't say, Buy good enough materials at the best price, but instead, "In effect, the

notion of highest quality as an absolute standard is rejected and replaced with a practical idea of the quality best suited for the price range and design problems of a particular company's products."² Don't say, by getting someone to do the details, an executive has more time to use his judgment; it is much more in keeping with the dignity of a new profession to say, "operations research will affect the executive's job by making him more conscious of intangibles. By presenting him with a comprehensive analysis of the quantitative factors it will focus his attention on those areas where his judgment is of prime importance."³ Of course, you'll never speak of what makes a customer tick; you'll say, "when the scientist looks at these same figures, he seeks in them a clue to the fundamental behavior pattern of the customers."⁴ And it just won't do to give each factor in a problem its proper weight; you must "combine and sublimate such otherwise inconsistent goals to a higher unified and consistent goal."⁵

5. There are, nevertheless, certain standard words that readers expect to find in literature of this character, without which you may not achieve a ring of true authenticity. Thus, you are expected to speak of "techniques" rather than methods, and if you feel obliged to use the latter term in any form, be sure you say "methodology." Then it is indispensable that you "integrate" something or somebody; you had best call your profession an "integrating process." Decisions must never be carried out; they must be "implemented." It will be good if you can work in "automation" somewhere and thus get the umbrella of the forward-looking who are no longer content merely to mechanize. If any of your ideas sounds a trifle weak, just say it is "practical;" that always convinces a business man. When anything needs to be adapted to something else, don't make the mistake of using that word; don't say "geared," either, for that will stamp you as just a little out

of date; the only possible word today is "tailored."

6. Now you are ready to go to your public. And first, of course, you must tell them what your profession is. But be careful! It's not wise to give it too precise a definition. Don't be so incautious as to say, "In a larger sense, value analysis is just a special name for good procurement."⁶ That would give you away. Besides, if you give a good broad definition, maybe it will cover some fields of activity you haven't thought of. Try for an approach like this: "It is not our purpose to engage in any inconclusive battle over definitions of the concept."⁷ If you can succeed in discussing your subject without telling anyone what it is, then you've nothing to worry about; you're in!

7. Next to the name, the most important thing is to convince people that this is no old stuff you are giving them. Grasp this nettle firmly. Fling it at them: "There is a new concept in management. It is called operations research."⁸ "Mathematical programming is not just an improved way of getting certain jobs done. It is in every sense a new way."⁹

8. A touch of Gestalt won't do any harm. See if you can evolve something like this: "Operations are considered as an entity. The subject matter studied is not the equipment used, nor the morale of the participants, nor the physical properties of the output; it is the combination of these in total, as an economic process."¹⁰

9. You must let industrial managers know they are dumb, but this requires a deft touch, as you can imagine. You have to do this, because, if they aren't dumb, you can't make a case for taking over part of their job. But you can't let them know how dumb. So take it gently. By saying something like, "Many executives believe that a comprehensive, objective, quantitative analysis of the

¹Miller, *Ibid.*, p. 122

²John J. Caminer and Gerbard R. Andlinger, "Operations Research Roundup," *Harvard Business Review*, November-December 1954, p. 126.

³Cyril C. Herrmann and John F. Magee, "Operations Research for Management," *Harvard Business Review*, July-August 1953, p. 161.

⁴Herrmann and Magee, *Ibid.*, p. 166.

⁵Miller, *Ibid.*, p. 121

⁶Caminer and Andlinger, *Ibid.*, p. 122.

⁷Herrmann and Magee, *Ibid.*, p. 166

⁸Alexander Henderson and Robert Schlaifer, "Mathematical Programming," *Harvard Business Review*, May-June 1951, p. 21

⁹Herrmann and Magee, *Ibid.*, p. 161

Stanley K. Miller, "How to Get the Most Out of Value Analysis," *Harvard Business Review*, January-February, pp.125, 128.

