

Operant Subjectivity

The International Journal of Q Methodology

**Acknowledgements, Preface and Chapter One
of William Stephenson's
*Psychoanalysis and Q-Method*¹**

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Acknowledgements (1954)

The present book follows upon the heels of my earlier one in which the general principles of Q-method were described. In the present case more intensive use has been made of the method, helped by grants from the Social Sciences Research Committee of the University of Chicago. I wish to thank the Committee for extending some of its resources to me. Without the wit, understanding, and helpful criticism of students with whom sections of this book have been discussed, the pages would have been less pertinent, perhaps, than they are. I am especially indebted to Mr. L. Kohlberg, my research assistant for studies upon which this book is based, who reminded me, with some interesting consequences, of the contribution that the great American philosopher C.S. Peirce had made to the philosophy of science. The book was written for the main part, during my stay at the University of Washington as Walker-Ames Professor of Psychology, and I take this opportunity to thank the electors, and the members of the Department of Psychology at the University of Washington, for making possible a most happy stay at Seattle.

W. Stephenson

Preface (1979)

I had forgotten that this manuscript existed when, in January 1979, I wrote a paper which was intended for *American Psychologist* as a sequel to my “Comment: Q-methodology and Newton’s Fifth Rule” [Stephenson, 1979]. the paper having as its title “Self as Operant Factor Structure.”² In this I made reference to an earlier book manuscript, entitled *Intimations of Self Psychology*, supposing it to be the only manuscript on Self, written in the early 1950s. The references to psychoanalysis, however, were also in the forgotten manuscript, which I came across in my library in February 1979. It had been written, for

¹ I am indebted to Steven Brown for providing me with a copy of this manuscript. Apart from formatting and minor typo corrections, the text remains unchanged. [Ed.]
² “Self as Operant Factor Structure” remains unpublished. It is probable that Stephenson incorporated some of the material from this paper in a later unpublished manuscript, “Self as Operant Subjectivity” (Stephenson, 1984), one of the unpublished manuscripts described by Stephenson as one of his “Ten Pillars of Q-Methodological Wisdom” (Stephenson, 2024). [Ed.]

the main part, when I was Walker-Ames Professor at the University of Seattle (1951), and when Lawrence Kohlberg was my research assistant at the University of Chicago, to whom I give particular thanks in the Acknowledgements. There were in fact three book-size manuscripts, nothing of which was published for reasons due, perhaps, to my obtuseness, but mainly because no-one was prepared to look at subjectivity as such in a psychology dominated by objective science.³ *The Study of Behavior: Q-technique and its Methodology* almost met the same fate of being put into limbo, a leading psychometrist reviewer saying that it was unacceptable – apparently he “couldn’t understand a word of it.” Now, 25 years later, it is still in print, as a Midway Reprint of the University of Chicago Press.

The present manuscript, however, is perhaps of some historical interest, because I was involving “self-reference” in psychoanalytic theory three decades before it became a topic of discussion amongst psychoanalysts themselves, as, for example, in *Contemporary Psychoanalysis* of October 1978, which is devoted to a symposium on the theory of self. I have therefore left the manuscript on *Psychoanalysis and Q-method* untouched, except for minor verbal corrections, but have included amplificatory comments at appropriate places, to clarify some points and to show the development of important theory and methodology over the years, from 1935 onwards. These comments are clearly placed in brackets [] and contrasting typeface, to separate them from the original manuscript. The references, therefore, become a mixture of old and recent, but to bring the volume up-to-date I add the substance of the paper I had written in January, 1979, so that the present chapters cover over four decades of interest in psychoanalytic theory.

William Stephenson

March 1979

Chapter 1: Some Matters of Definition

Introduction

I am to proceed in these chapters with the thesis that Q-methodology provides psychoanalysis with a *modus operandi* for testing psychoanalytic theory. By Q-methodology (Stephenson, 1953) is meant, briefly, the application of factor analysis and Fisherian experimental methods to the study of any “single case,” for example, a patient under psychoanalytical treatment. It will be helpful if I first explain my own personal position *vis-à-vis* psychoanalysis, and if I give, at the same time, a foretaste of the basic principles with which it is proposed to probe into psychoanalytic theory.

I have not identified myself with psychoanalysis in any way so far in academic life. But, as it happens, I was in analysis twenty years ago with a leading member of the English School. I have therefore always been aware of its problems, and have had some practical acquaintanceship with its difficulties. It would have been unusual, indeed, for a student in London twenty-five years ago not to be intrigued by the thinking of Dr. Ernest Jones, Professor J.C. Flugel, and Mrs. Melanie Klein. I was taught my official psychology, however, under the more austere eyes of Charles Spearman, James Ward, and G.W. Stout, and academic psychology and psychoanalysis mixed, at that time, about as little as

³ Stephenson misremembers here. He did write three manuscripts in his early years in Chicago: *Intimations of Self* (c. 1950), *The Study of Behavior: Q-technique and its Methodology* (1953), and *Psychoanalysis and Q Method* (1954). *Intimations of Self* and *Psychoanalysis and Q Method* remain unpublished. [Ed.]

vinegar and oil. I had to admit to myself, indeed, that psychoanalysis, fascinating though it was, and supremely suggestive in regions extending outside the consulting-room into literature, the humanities, and anthropology, fell short in two fundamental respects. It was rooted in some outmoded dogmas about the mind, and it had developed no operationally defined procedures or constructions peculiar to its needs.

With respect to *mind*, it should be remembered that few psychoanalysts were, or have been, trained in academic psychology. An exception was Freud himself, as we now know from the ambitious “project” he fashioned, and discarded, from the psychology of his early days [E. Jones (1953)]. My own academic teachers, of course, also believed in consciousness and mind as such; for them it existed, *substantially*, a psychical substance different from body and matter. The psychoanalysts are perhaps still not very sophisticated about such a belief, and most or all of them would probably support a separation of mind and body today. To them, with Freud, the unconscious mind is “something unreal, which can nevertheless produce something so real and palpable as an obsessive action!” (Fenichel, 1945, p. 235). For my own part I can hold to no such premises. With the early behaviorists one must maintain that there is no consciousness or mind in any psychical sense, and therefore also no unconsciousness in that sense. There is only *behavior* (Farrell, 1950, pp. 170-198). As a psychologist, and scientist, one can be concerned with behavior only.

It will be said, of course, that no one in scientific psychology believes any longer in “mind” in a substantial psychical sense. Rather, the term mind, whether conscious or unconscious, is to be regarded as a scientific construct. But this could be specious, and perhaps spurious in many respects. The matter is complicated – as full of holes as a sponge. Thus, I take a forthright stand by including all man’s so-called subjectivity within the rubric of behavior. This includes what is ordinarily called mental, conscious, or unconscious states. It includes man’s dreaming, thinking, musing, feeling and the like, all of which are examples of everyday behavior, every bit as much as is walking to post a letter or running to catch a train. All so-called subjectivity is just behavior (Ryle, 1950; Stephenson, 1953). It is open to our *objective* regard, just as much as is a rat or a man in the act of running. Every manner of objective, scientific, procedure can be applied to it (Stephenson, 1953). Where, then, lies the special virtue of designating all this as behavior? It rests in the methodological distinctions that can be drawn, when the postulate of behavior is accepted, between what is the factual or initial phenomena of psychological science, and what is theoretical. The term “unconscious,” we shall see, is frequently attached to the latter when it belongs only to the former, and, in general, much is talked of in psychology, as in psychoanalysis, as if it were genuinely theoretical when nothing of the kind is at issue.

Behavioral Segments

The concept of a “piece of behavior,” or a behavioral segment (Kantor, 1933), is thus fundamental for us. Running to catch a train is a segment of behavior, with a loose beginning in the sight of the train in the station, and a panting end as we collapse into the carriage seat. This, in principle, is the sort of thing we study in psychology. Our concern is always, fundamentally, with segments of behavior, which may be as brief as a side-glance at a passing pretty dress, or as congested as a dream, or as extensive and as expansive as the course of a psychoanalysis. All such, however else they may differ, have certain roots

in *personal history*, that is, in the person's past behavior in some way, usually in his ostensible learning.

It is useful, in the chapters which follow, to have before us a simple example of the various conditions that may mediate in a typical segment of behavior. For this purpose it is, perhaps, to find a better example than the one I have referred to briefly elsewhere (Stephenson, 1953, p. 128f), in which one uses a simple *Art-form* test (Stephenson, 1949). This consists of five pieces of colored paper, three small squares and two small rectangles; the subject is asked to compose an abstract, i.e., "meaningless," design with these upon a larger white sheet. The designing, from beginning to end, constitutes a behavioral segment. In principle, one would say, the subject X contributes to the designing, as do the colored papers and the white background sheet upon which the design is made. If X is preoccupied, in sexual or financial trouble, say, he may "project" something of this upon the design, without knowing it. It is this kind of behavior that the psychoanalyst deals with in principle. If X is not so preoccupied, his *past* history may enter into the composing, in the sense that he designs his composition in a manner corresponding to certain general features of his upbringing: he may produce a rigid design, which is essentially an example of the way he habitually thinks and behaves. Behavioral *structure* is at issue. That rigidity of character can very easily show itself in the similar rigidity of the design he makes with the colored papers is the kind of behavior dealt with, for example, by the Rorschach tester. Or, if X is truly artistic and free from preoccupations and militating structures of the above kinds, he may use the colored papers in such a way as to involve their intrinsic or "reality" qualities as well as his own – in this way he may achieve a truly sublimated⁴ design, whose merit, as Ruskin would have said, is that the artist has not allowed the materials to master him, nor has he altered the intrinsic attributes of his materials.

Thus, different designs, corresponding to different behavioral segments, may have very different conditions at issue in their interactional *settings* (as we would call the complex of conditions at issue in each instance). Precisely the same design, moreover, could "mean" very different things – for one person it could be a projection of a stress, for another a mere repetition of his own structure, for another perhaps a sublimation. Similarly if two dreams could be alike, their interactional conditions might be totally dissimilar, and their explanation likewise. Every behavioral segment is thus a concrete matter, that may involve many and diverse conditions in its setting.

Psychoanalysts, then, bring particular types of behavior to our attention, most of them subtle and long-overlooked, such as concern slips of the tongue, mistakes, and the like. The *Art-form* test can provide us with suitable examples of behavior of the kind attended to by psychoanalysts. Thus, one of my early students, a bright Oxford graduate, composed a crude fireplace on one occasion with the five pieces of colored paper comprising the test material (see Fig. 1). What was odd about it was the contrast between her sophistication in other respects, and the concreteness and crudity of this design.⁵ Puzzled, I applied the psychoanalytic method of free associations to the situation, and found at once that the girl had symbolized, in her composition, a dream of the previous evening. In this there had been a fireplace, too, with a newborn baby in the ashes underneath, and the student had been afraid, in the dream, lest the ashes should get in the baby's eyes. When the dream, in

⁴ The psychoanalyst uses the word sublimation with a meaning different from that given here. For me it consists of transaction (Bentley, 1935) between real properties of things and persons: no Freudian unconscious processes need be involved in any way.

⁵ She had been instructed to provide an *abstract* design, but clearly hadn't done so.

turn, was analyzed, that is, subjected to the same method of free association and all the hypothesis-making that is attendant upon it in psychoanalysis (Kubie, 1952), there was clearly revealed a situation of considerable stress under which the student was reacting. It does not require much acquaintanceship with psychoanalysis to have at hand an explanation of the design made with the colored papers.

The example is worth another word or two. The student was not aware, as she composed the simple design, that there was a connection between her design and the distressing situation, nor, of course, that the dream was a cartoon or condensation of the same situation. The behavioral segment represented by the distressing matter was subsumed first as a dream, and then again as a composition with the five pieces of paper. The three segments [the designing (A), the dreaming (B), and the gross distress (C), which had to do, as the reader might guess, with sexual matters], were apparently linked together, A and B being expressions in some way of C. *The psychoanalyst, when he refers to the unconscious, is always referring to behavior such as A or B, which, when analyzed, leads back to segments such as C.* He attends to A, in the first place, because it is in some way unusual: sophisticated women do not design such simple compositions or misunderstand such instructions in this gross manner.

It is important to keep such matters very clear. The psychoanalyst is apt to make two mistakes at this point. He generalizes too widely from such incidents, and he frequently overlooks the fact that what he calls unconscious behavior is merely such as leads back associatively to other behavior, often no less odd than the first, but obvious and concrete behavior nevertheless.

With respect to the first mistake, it is widely asserted by analysts that all behavior is somehow odd in the above associated manner. A typical example is provided by the otherwise cautious Kubie:

Unconscious processes, which we cannot perceive by simple self-examination alone... in conjunction with conscious processes, are continually shaping and influencing our behavior, and indeed every psychological experience at every moment of life (Kubie, p. 91).

Almost every psychoanalyst believes this sort of thing, and there can be no justification for it. Psychoanalysts have plenty to offer, without claiming everything. Thus, thousands of abstract designs might be made by students with the *Art-form* test, without finding another example of symbolization and projection. The matter can be put to test by seeing where free associations lead from the abstract designs composed by any number of students. It will be found that they lead nowhere in any immediate sense. There is much in behavior, fortunately, that isn't "unconsciously" determined in any proper Freudian sense of the term. It is true that abstract designs with the *Art-form* test are usually exhibitions of *structured* behavior (as I called it), of the kind that the Rorschach deals with. It may be objected, therefore, that these matters, of the rigidity of one person, the expansiveness of another, and so forth, have a psychoanalytic explanation. Perhaps so. But the *behavior* at issue doesn't lead back in any obvious manner to other rich modes of behavior, as A leads to B and to C in the above example. It is the confusion of such simple differences that leads, in psychoanalysis, to so many unhappy and unwarranted assertions.

Thus, I believe it to be of importance to remember that unconscious behavior is basically just behavior which has been classified as of a certain kind: its property is that, whatever else may be involved, the method of free association leads back to related

behavior, as A leads to B, and B to C in the above example.⁶ The relating is in a *direct* manner, such as may be open to immediate tests and scientific operations, and not just to remote possibilities.

My student *symbolized* her distress in segment A. This is in the first place a name for this particular mode of behavior. There are of course many other classes of odd behavior of the kind, which the analysts call *reversals*, *undoing*, *projections*, *symbolization*, *displacements*, *denials*, *isolations*, *substitutions*, and the like. *Concrete behavior exists every time the analyst deals with such matters, and a particular segment may involve one or more such modes, or lead associatively from one to another.* Such behavior occurs, as concretely as one sings, shouts, laughs, or cries.

Theory in Psychoanalysis

It is more usual, however, to regard these classes of behavior as somehow *theoretical*, rather than factual. The “unconscious” mind is also considered by many (e.g., Dingle, 1949) to be good theory, whereas the above reasoning suggests that if one says X has an unconscious mind, it may be no more than to say that under appropriate circumstances X behaves in the odd manner subsumed under the term “unconscious” in the first place. Where, then, does theory enter into psychoanalysis? It is from this point that our inquiries begin. Everyone knows that there is much that is theoretical, if not, according to many, purely speculative, about psychoanalysis, and it is indeed almost an Herculean task to disentangle fact from theory and fact from fancy in psychoanalytic literature. Yet the attempt has to be made. I propose to this along thoroughgoing pragmatic lines, in the strict sense of Charles S. Peirce’s philosophy of scientific inference (Buchler, 1950), as it is of John Dewey’s (1938) to a lesser degree. This provides for a principle of inference called *abduction*, close cousin to induction, which helps to bring some order into the realm of psychoanalytic theorizing. The matter stems from discussion of *explanation* in scientific work. There are some, notably the strict positivists, who reject explanations of any kind in science, regarding them as metaphysical at worst and anthropomorphic at best. Everyone knows the distinction made by Newton between laws and causes: his laws of motion concern empirical, observable matters, but his theory of gravitational attraction was given as an explanation for the laws, that is, their fundamental cause. Such explanations are *abductions*, reaching into new facts in principle.

In physics, apparently, it is no longer necessary to hold to this or any other abduction – the strict positivist is a relativist, dealing only with operations and immediate sense-impressions. The pragmatist, however, thinks quite otherwise, and I hold to this position too, that science has always in fact proceeded by way of the logic of abduction rather than by any other exclusive means. It was this method, indeed, that drew Peirce apart from William James, for Peirce was the true pragmatist, and James more essentially the positivist notwithstanding James’ sponsorship of pragmatism.

The positivist rejection of explanation, as the “cause” of events, stems from Hume; but in psychology the rot began with William James, who believed, indeed, that perhaps his only original contribution to psychology was to see that “all attempts to *explain* [the]

⁶ Again, if it is said that the structured behavior is in principle of the same kind, or much more complicated, then of course there is no possibility of demonstrating it – as we can A-B-C in the above example – except by lengthy and circuitous routes and reasonings. The significant matter in psychoanalysis is the richness, immediacy, and concreteness of such behavior as I have exemplified for the case of A-B-C of the student at Oxford.

phenomenally given...as products of deeper-lying entities...are metaphysical." Peirce, on the contrary, saw clearly that scientists used explanations (as hypotheses from "effects" to "causes") freely, and that there is not much distance, so to speak, between so-called metaphysics and many of the really original ideas of a science. The rejection of causes on metaphysical grounds can be quite arbitrary – one eliminates that way, ideas "for which one happens to have a distaste" (Buchler, on Peirce, 1950).

Thus, in looking into psychoanalytic theory I am to peer with both eyes upon its *explanatory* aspects, meaning both abductive and deductive inference. This will become apparent in the sequel. Meanwhile I can set the stage with a question. When it is said in psychoanalysis that a patient is rationalizing, the reference is in the first place to a general class of behavior, as I have suggested above. If it is said that rationalizing is defensive behavior, however, one means, presumably, that the patient is really anxious in some way and cannot face up to it; something within the patient, therefore, makes him behave in this rationalizing manner instead of being anxious. The rationalized behavior is observable; so, in principle, is the anxiety: what is not is the patient's defensiveness, as a process of some kind that went on within him. This is not because in principle one cannot look into a patient's mind to see him being defensive, but because the concept is needed to explain why the anxiety wasn't expressed overtly, and had to be twisted out of shape and disguised as rationalized behavior. What, then, is the precise logical status of this concept? I call it an abduction,⁷ following Peirce. Or, consider another example drawn from work by Carl Rogers (1951) and called by me *Rogers' law* (Stephenson, 1953). For adjusted persons there is a certain concordance between their *present* self-concepts and their concept of themselves at their *best*: thus I might think of myself as a worthy citizen, and would agree that this is also characteristic of me *at my best*. Maladjusted or mentally sick persons, however, may think of themselves as unworthy citizens, though they might agree that this not characteristic of them at their best. In Q-technique it is possible to represent facts of this kind by correlation coefficients: I would call them all instances of Rogers' law. Scientific work, of course, couldn't proceed without such laws, that is, generalizations from particulars to general laws. But the abductory scientist also wishes to discover *causes* as well as laws.

Attraction in Newton's case was such a cause, and similarly one might argue that behind one's *present* self-concept (1) and one's concept of oneself *at one's best* (2) there lies a genuine and more general principle of *self-worth* which explains the empirical factor vis-s-vis (1) and (2) (Standal, 1953). *Self-worth*, like attraction, or force, is not something observable in a direct manner. But neither is it an end-point to one's enquiries, a "final cause" in some sense. It is this that characterizes abductory inferences: they point to discoveries, suggesting a new order of facts. The puzzle has been, in the past, to grasp these additional discoveries, and it is our purpose to solve this matter for psychoanalytic theory.

⁷ It is not merely something with the status of a hypothetical construct (Wisdom, 1952) in the now-fashionable sense of the term: it is not a concept resorted to for lack of anything better, to be superseded as soon as methods exist for dealing with it by direct observation. Hypothetical facts, such as values one places in an equation or for want of empirical measurements, such as Hull's use of "excitatory potentials" in his theory of learning, are hypothetical constructs in this narrow sense.

Note Added in 1979

[Already in these few pages, the lines are drawn for important advances in the logic of science. Few, if any in psychology at the time, would have dared use the term “law” as is done above, for *Rogers’ law*, and there had been no mention of *abduction* in any literature since Peirce’s days except to deny it any significance. Hanson (1958) gave abduction due place, reminding us of Peirce’s aphoristic formulation:

Deduction proves that something *must* be; induction shows that something *actually is* operative; Abduction merely suggests that something *may be* (Peirce, Collected Papers, Vol. V, section 146).

I describe abduction, also, in my *Scientific Creed – 1961* (Stephenson, 1961).

We now restrict the term *explanation* to deduction, as the result of tested hypotheses, when the latter have been stated beforehand, prior to testing, as in the favored hypothetico -deductive methodology. For the reverse condition, where effects are first observed, and then offered an explanation *a posteriori*, we now use the term *understanding, interpretation* (as in psychoanalysis), or more broadly, *abduction*.

I was unaware of Peirce’s philosophical writings, I confess, until Larry Kohlberg⁸ called my attention to them. Buchler’s *Charles Peirce’s Empiricism* (1939) and his *Philosophy of Peirce* (1950) opened Pandora’s box to me, newcomer in 1948 to the United States. The concept of abduction fitted my logic-of-science requirements completely, critical as I was, then, of Newtonian deductivism. It is fateful that my version of Sir Isaac Newton’s aborted attempt to write a Fifth Rule of Reasoning (Stephenson, 1979) is in fact a Rule for Abduction.

How I came upon the notion of lawfulness as other than prediction from fixed and timeless laws, and, instead, as probes into reality, is easy to account for: it stems from D’Arcy Thompson’s *Growth and Form* (1942). A book I carried with me to Chicago in 1948 as my methodological bible. There, in *Growth and Form*, is mention of *Berelli’s law* (that the impulse of a muscle is proportional to its volume), *Froude’s law* (the bigger the fish, the faster it can swim), *Stokes’ law* (dust particles, spores and bacteria fall very slowly through the air)...and so on for *Brooks’ law*, *Bergmann’s law*, *Errera’s law* etc. slowly through the air. *Rogers’ law*, and all others in Q-methodology, are of this same pragmatic nature, indicative that something *may be*, but neither *must be*, nor *actually is*: they provide the condition of instruction in terms of which Q-sorts are performed - the Q-sorters, of course, being quite unaware of any such lawfulness.

That reversals, undoing, projection, etc. are merely classes of behavior, and not theory, is now well-attested, for example by Basch (1973).]

References

- Bentley, A. F. (1935) *Behavior, knowledge, fact*. Principia Press.
 Basch, M. F. (1973). Psychoanalysis and theory formation. *Annual of Psychoanalysis*, 1, 39-52.

⁸ Lawrence Kohlberg (1927-1987) was one of Stephenson’s Research Assistants in the University of Chicago’s Department of Psychology. Kohlberg’s pioneering work on moral development established him as one of the leading psychologists of the second half of the Twentieth Century. [Ed.]

- Buchler, J. (1939). *Charles Peirce's empiricism*. Harcourt Brace & Co.
- Buchler, J. (Ed.) (1950). *The philosophy of Peirce: Selected writings*. Harcourt Brace & Co.
- Dewey, J. (1938). *Logic: The theory of inquiry*. Henry Holt & Co.
- Dingle, H. (1949). The logical status of psychoanalysis. *Analysis*, 9(4), 63-66.
- Farrell, B. (1950). What is "experience"? *Mind*, 59, 170-198.
- Fenichel, O. (1945). *The psychoanalytic theory of neurosis*. W.W. Norton & Co.
- Hanson, N. R. (1958). *Patterns of discovery*. Cambridge University Press.
- Jones, E. (1953). *The life and work of Sigmund Freud*. (Vol. 1.) Basic Books.
- Kantor, J. (1933). *A survey of the science of psychology*. Principia Press.
- Kubie, L. S. (1952). Problems and techniques of psychoanalytic validation and progress.
In E. Pumpian-Mindlin (Ed.), *Psychoanalysis as science*. Stanford University Press.
- Peirce, C.S. (1935). *Collected Papers of Charles Sanders Peirce*. Volume V. Harvard University Press.
- Rogers, C. (1951). *Client-centered therapy*. Houghton Mifflin Co.
- Ryle, G. (1950). *The concept of mind*. Macmillan.
- Standal, S. (1953). *A contribution to client-centered therapy*. [Ph.D dissertation proposal]
University of Chicago.
- Stephenson, W. (1949). *Testing schoolchildren: An essay in educational and social psychology*. Longmans, Green and Co.
- Stephenson, W. (1953). *The study of behavior: Q-technique and its methodology*.
University of Chicago Press.
- Stephenson, W. (1961). Scientific creed - 1961: Philosophical credo. *The Psychological Record*, 11(1), 1-8.
- Stephenson, W. (1979). "Comment: Q methodology and Newton's Fifth Rule". *American Psychologist*, 34, 354-357. <https://doi.org/10.1037/0003-066X.34.4.354>
- Stephenson, W. (2024). "Ten pillars of Q-methodological wisdom". *Operant Subjectivity: The International Journal of Q Methodology*, 44, 33-46.
<https://doi.org/10.22488/okstate.22.100502>
- Thompson, D.W. (1942). *On growth and form*. Cambridge University Press.
- Wisdom, J. (1952). *Other minds*. Blackwell.