Operant Subjectivity The International Journal of Q Methodology Pamela Meets Evelyn: Single Case Studies of Self Charles Mauldin Element Learning Management Solutions, Texas

Abstract: This paper compares two single case Q studies we call "Pamela" and "Evelyn," pseudonyms for the women who participated as subjects. The studies comprise a set. Both studies focus on "self" in that Pamela and Evelyn each were required to consider and express who they are and what makes them tick. The scope of life events for both studies was defined as the participant's "entire life," yet the life interviews allowed each participant spontaneously to limit the scope of life events. Both studies use theoretic probes drawn from self theory. Both employed methods commonly used in Q. The studies differed in two ways. In the second study, Evelyn, we changed two procedures intended to improve the research approach, and both changes worked. One change increased the yield of factors from three for Pamela to six for Evelyn, with implications for self theory and for research approaches in future research. The article includes numerous tables, including some uniquely appropriate for single case studies.

Keywords: intensive analysis, life interviews; Q methodology, self theory; single case

Methodology for the Single Case

William Stephenson called Q a methodology for the single case (Stephenson, 1953, p. 12). Even in Q studies with multiple participants, we expect to find single cases, maybe three or four in a study, as pure exemplars of orthogonally different vectors we refer to variously as viewpoints, positions, perspectives, narratives and discourses. Yet studies with single participants, using multiple conditions of instruction to probe and explore the subjectivity of that individual, provide the most complete evidence for Stephenson's assertion that Q is a method for the single case.

This paper reports two single case Q studies. Although the participants, Pamela and Evelyn, are different persons, the two studies comprise a set: both studies used self theory as the basis for experimental probes, asking each participant to use sorts to describe real self, ideal self, future self and self as seen by others. Each study also asked the participant to describe self in concrete situations drawn from life interviews and to describe others they regard as significant and influential in their lives.

In the second study, with Evelyn, we made changes intended as technical improvements. The first change involved sort items. Whereas Pamela's sort was comprised of "traits" (psychological attributes), Evelyn's sort was comprised of "characteristic behaviors" (feelings, beliefs, intentions). The second change involved expanding the conditions of instruction, in number and in kind. Whereas Pamela completed 15 sorts, Evelyn completed 50, all those done by Pamela and numerous others with different approaches and probes. For an overview of the studies see Table 1.

Table 1. Pamela and Evelyn: Research Design Comparison

Design	Pamela	Evelyn
Topic and scope	Self, Pamela's life	Self, Evelyn's life
Methods mix	Life interviews (important life situations and family members)	Life interviews (important life situations, family members, peers, famous people, fictional characters, brand personas)
	Concourse: personalize Cattell trait inventory to Pamela understanding and usage.	Concourse: Evelyn writes characteristic behaviors for all persons and situations; sort extracted.
	 Q Method: Principal Components Analysis, Varimax Rotation, 3 factors Pamela projections on factors, persons and situations; interviews about life situation and family history 	 Q Method: Principal Components Analysis, Varimax Rotation, 6 factors Evelyn projections on factors, persons and situations; association of factor roles with new situations and role appropriate products and services
	Validate interpretation with Pamela	Validate interpretation with Evelyn
Concourse	Traits (words for psychological attributes)	Characteristic behaviors (feelings, beliefs, intentions)
Sort items	87 traits from Cattell inventory	79 characteristic behaviors from Evelyn's person and situation descriptions
Sorts/COI from self theory	Real self, ideal self, future self, self as seen by others	Real self, ideal self, future self, self as seen by others
Sorts/COI: conditions of instruction	Total 15 sorts/conditions of instruction: 4 from self theory, 6 personal situations, 5 family members	Total 50 sorts/conditions of instruction: 4 from self theory, 13 personal Situations, 3 family members, 9 peers, 6 famous persons, 10 fictional Characters, 5 brand personas
Names for operant factors	EmpoweredAdriftIndependent	 Constructive Independent Martyred Career Woman Ruthless Controller Dreamless Giver Dramatic Dreamer Contented Lover
Citations	The Pamela study was done in 1971, prompted by a debate about trait theory with a psychology professor at the University of Missouri (Mauldin, 2013).	The Evelyn study was done in 1977, prompted by the desire to upgrade the method, first by using behavioral sort items instead of trait sort items and second by expanding the life situation conditions of instruction and expanding the personal references beyond family to include peers and social role models. The study grew to 50 sorts because Evelyn, an enthusiastic and articulate participant, kept adding people she wanted to include Evelyn suggested articulating sort items in first person present tense "because it helped me become who it is during sorting" (Mauldin, 1985).

Theoretical Underpinnings

Self theory is ubiquitous and rich, and we make use of three core themes from self theory. First, we use basic ideas about self esteem and self evaluation, specifically that people compare real self with ideal self, that people compare themselves with others, and that people experience themselves as changing and can recall themselves in past situations and imagine themselves in the future (Rogers, 1959). Second, we use basic ideas about our perceptions of how others perceive us, the "looking glass" phenomenon (Cooley, 1922). Third, we put a strand of role theory (Mead, 1934) to work, the strand that defines role as a coherent set of behaviors for a particular situation, a fit with both Q operations and Stephenson's assertion that subjectivity (feelings, beliefs, intentions) is "behavior, every bit as much as walking from one place to another" (Stephenson, 1953, p. 25).

Each of these theoretical themes provides a rich source of ways to observe, hypothesize and explain. The self evaluation theme feeds assertions about psychological health and therapy, for example, that self actualization is in itself a motive (Maslow, 1968, p. 204), that a sense of self esteem is healthy and that a well-adjusted person sees real self, ideal self and self-as-seen-by-others as much the same. The looking glass theme feeds assertions about authentic and inauthentic selves (Jung's "persona," the mask versus "anima," the truth [Jung, 1973]) and Goffman's assertion (1959) that all self presentation amounts to acting, refuted by Stephenson (1992, 2006). The role theory theme feeds divergent definitions of role — as one's actual behavior in a situation, as a protocol of expected behaviors for a social position, and as a part to be played (echoing Jung and Goffman).

The concept of roles as actual behavior fits with Q method operations using sorting to capture behavior sets (e.g., feelings, beliefs, intentions) as evidence of natural structures (viewpoints, perspectives, narratives) to be analyzed and understood.

Pamela, According to Pamela

Pamela, the participant in the first study, was an educator, manager of a professional staff, married with young children and working toward a Master's degree in education. She seemed positive about life and always busy.

Pamela's Sort

Pamela's sort consists of traits, words that refer to psychological attributes. Why traits? Our rationale skirts trait theory, which defines traits as properties of personality that reflect behavioral tendencies and seeks to reify traits genetically (Eysenck, 1985) and statistically (Matthews, 2003). Instead, our plan is to mimic daily communication in which people, you and I and everyone, habitually use trait words to describe ourselves and others — in conversations, in resumes, in recommendations and much more.

Perhaps the importance of attributing traits is reflected in the number of trait words one might use. Dictionary searches established an inventory of 17,593 traits, reduced to 4,505 by eliminating duplicate meanings (Allport & Odbert, 1936). For perspective, a study of vocabulary sizes estimated that U.S. college students have vocabulary sizes in the range of 12,000 to 17,000 words (Zechmeister et al., 1995).

Using empirical methods, Cattell (1945) reduced the inventory of traits to some 131 attributes, which provided a starting place for Pamela's sort, which was reduced to 87 items by removing words Pamela found meaningless (such as "taciturn retroversion") and, when Pamela felt that a group of words had the same meanings, by allowing her to

choose the word she found most natural and remove others. Pamela's full sort appears in Table 2.

Table 2. Pamela's Sort — Traits

	Pamela's Traits								
1	Suspicious	23	Unstable	45	Proper	67	Tolerant		
2	Destructive	24	Disorderly	46	Knows self	68	Sad		
3	Natural	25	Grateful	47	Foolish	69	Playful		
4	Submissive	26	Practical	48	Cautious	70	Amorous		
5	Pessimistic	27	Sincere	49	Comfort-loving	71	Lazy		
6	Assertive	28	Selfish	50	Reverent	72	Hostile		
7	Undependable	29	Emotional	51	Adaptable	73	Narrow		
8	Idealistic	30	Orderly	52	Mature	74	Learned		
9	Thoughtful	31	Lively	53	Frank	75	Insecure		
10	Conscientious	32	Cooperative	54	Sensitive	76	Obstinate		
11	Daydreaming	33	Way out	55	Cheerful	77	Egotistical		
12	Secretive	34	Generous	56	Moody	78	Careless		
13	Attractive	35	Sociable	57	Frustrated	79	Talented		
14	Rebellious	36	Expressive	58	Changeable	80	Gentle		
15	Independent	37	Friendly	59	Infantile	81	Demanding of self		
16	Demanding of others	38	Courageous	60	Realistic	82	Extraverted		
17	Deep	39	Incoherent	61	Lacks ability	83	Curious		
18	Verbal	40	Deliberate	62	Timid	84	Creative		
19	Balanced	41	Fair	63	Self-centered	85	Thrifty		
20	Energetic	42	Agitated	64	Smug	86	Reliable		
21	Determined	43	Self-deceiving	65	Dishonest	87	Honest		
22	Future-oriented	44	Impulsive	66	Inflexible				

Sorting followed this frequency distribution and scoring:

Disagree					Neutral							Agree		
Score	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	
Frequency	4	5	6	7	8	9	9	9	8	7	6	5	4	
						N = 87								

Pamela's Conditions of Instruction

The 15 conditions of instruction that directed Pamela's sorts were drawn from self theory and life interviews in which Pamela nominated key life situations and important family members. The conditions of instructions are listed in Table 3.

Table 3. Pamela's Conditions of Instruction

	Pamela's Conditions of Instruction							
1	Me as I generally am (real self)	Self theory						
2 Me as I would like to be (ideal self) Self theory								
3	3 Me as most people see me (generalized other) Self theory							
4	Me as I'm becoming (future self)	Self theory						

	Pamela's Conditions of Instruction						
5	Me as I am at work Life situation						
6	Me as I am at school (in Master's program)	Life situation					
7	Me as I am with my children	Life situation					
8	Me as I am with my husband	Life situation					
9	Me as I was at 15 (when parents divorced)	Life situation					
10	Me as I was in college (undergrad)	Life situation					
11	My husband as he usually is	Family					
12	My father as he usually is	Family					
13	My mother as she usually is	Family					
14	My stepmother as she usually is	Family					
15	My brother as he usually is	Family					

Factor Analysis and Pamela's Factor Structure

Factor analysis of Pamela's 15 sorts produced evidence for 3 factors, interpreted as Empowered, Adrift and Independent. Procedures included Principal Components Analysis and Varimax Rotation using the QUANAL software program, which produced the factor structure shown in Table 4. Because Pamela's sorts describe herself and other persons, and because the factor structure shows which persons loaded on which factors, this table can answer "who is who" questions: Did Pamela describe her real self as Empowered, Adrift or Independent? Did Pamela describe real self and ideal self as alike or different? How did Pamela describe herself at age 15 when her parents were divorcing? How did Pamela describe her alcoholic mother? How did Pamela describe her stepmother, who she felt had pre-empted Pamela's role as teen queen of the household?

Table 4. Pamela's Factor Structure/Who is Who?*

	Pamela's Factor Structure							
Sort	Conditions of Instruction	Empowered	Adrift	Independent				
1	Me as I generally am (real self)	425	539	386				
9	Me as I was at 15 (when parents divorced)	-283	746	056				
10	Me as I was in college (undergrad)	256	650	104				
13	My mother as she usually is	048	496	-315				
5	Me as I am at work	855	-118	306				
3	Me as most people see me (general other)	829	-166	336				
7	Me as I am with my children	782	107	073				
6	Me as I am at school (in Master's program)	780	151	137				
2	Me as I would like to be (ideal self)	769	-424	098				
8	Me as I am with my husband	611	175	191				
12	My father as he usually is	756	-259	414				
15	My brother as he usually is	674	095	-202				
11	My husband as he usually is	602	-219	481				
4	Me as I think I'm becoming	350	277	659				
14	My stepmother as she usually is	028	-252	631				

^{*}Factor loadings, decimals omitted

Interpretation

We begin interpretation by seeking a clear, simple understanding of each factor with the evidence at hand. The QUANAL software has constructed a sort for each factor, a factor array weighed based on sort loadings on the factor. We confirm Pamela's feelings and

thoughts about persons and situations highly loaded on the factor in discussions with her.

Factor 2: Adrift

We present Factor 2 first because I believe it's the most important factor in understanding Pamela in depth. Using a name for each factor is necessary to discuss factors. Ultimately Pamela and I agreed to call this factor "Adrift."

Table 5. Pamela Factor 2 Defining Traits - Adrift

	Pamela Factor 2									
#	Most Agree	+Z-score	+Z-Diff							
57	Frustrated	2.343	2.028							
75	Insecure	2.259	3.229							
29	Emotional	2.179	1.941							
44	Impulsive	1.658	2.017							
55	Moody	1.602	2.047							
14	Rebellious	1.473	1.766							
23	Unstable	1.277	2.540							
5	Pessimistic	1.116	1.169							
43	Self-deceiving	1.060	2.383							
68	Sad	1.012	1.613							
16	Demanding of others	-1.001	-2.116							
8	Idealistic	-1.059	-2.534							
67	Tolerant	-1.093	-1.333							
74	Learned	-1.185	-1.848							
79	Talented	-1.509	-1.510							
60	Realistic	-1.514	-1.867							
19	Balanced	-1.662	-1.952							
17	Deep	-1.719	-2.032							
84	Creative	-1.921	-1.836							
45	Knows self	-2.101	-3.426							
#	Most Disagree	-Z-score	-Z-Diff							

Table 5 details defining traits for the Adrift factor. In this analysis, we focus on traits at the sort extremes (strongly agreed with at the top, strongly disagreed with at the bottom), but only on those traits that distinguish this factor from others. The strongly agree distinguishing items are frustrated, insecure, unstable, emotional, impulsive, moody, rebellious, unstable, pessimistic, self-deceiving and sad. The strongly disagree distinguishing items are self-knowing, creative, deep, balanced, realistic, talented, learned, tolerant, idealistic and demanding of others. As much as Pamela's public self presentation seems positive and confident, the negative feelings she hides tell another story.

Who is who? Table 4 (above) provides the answers. We learn, going in, that Pamela's real self description ("me as I am") has its highest loading (.539) on Factor 2, and that real self is very much like three other descriptions: "Me at 15 when my parents were divorcing" (highest loading, 746); "Me as a college undergrad (.650) and "My mother as she usually is (.496)." So those sorts comprise a set. The higher a sort's loading, the

more it defines the set, so if you square the loadings, you see "Me at 15" accounts for almost twice the variance as does "real self" in defining the Factor 2 sort.

We build and confirm our understanding of these feelings in Pamela's account of her life dilemma at age 15, which is the sort loaded highest on the Adrift factor. We learn that Pamela earlier had wanted to become a nun. Her mother's alcoholism led to Pamela assuming household duties such as cooking and minding her younger brother. She parented both her mother and younger brother. Her parents' relationship worsened and led to their divorce. In spite of her difficult relationship with her mother, when her parents divorced Pamela insisted on moving to another state to live with her mother ("I can cook for her"). Wisely, her father refused to consider that ("Dad wouldn't hear of it"). Her mother far away, Pamela took on more responsibilities. She remembers herself as becoming "queen of the household," "getting to dress up" and "act as hostess" when her father, commander of an Army base, hosted parties. Later her father remarried, and Pamela had a new stepmother, "a good wife who could hold her own with Dad," and Pamela's reign came to an end. Pamela lived at home while she attended college, and her feelings about herself in that period remained much the same, as the factor loadings show: frustrated and emotional and sometimes rebellious. "Adrift" seemed an appropriate term to describe the feeling. Pamela agreed

Factor 1: Empowered

This factor describes an empowered person, filled with feelings of confidence, eagerness to engage and positive feelings about the future. This person feels prepared and able to deal openly and effectively with others. Pamela's description of ideal self loads significantly and purely on this factor.

To interpret this factor, we again focus on defining traits, extreme positive and extreme negative distinguishing items for the factor array. For Factor 1, the strongly agree distinguishing items are realistic, honest, mature, deep, tolerant, learned, fair, adaptable, conscientious, assertive and balanced. The strongly disagree items are smug, selfish, hostile, self-centered, rebellious, moody, insecure, secretive, pessimistic, self-deceptive, obstinate, dishonest, emotional, proper, destructive, infantile, frustrated and impulsive.

Who is who? Again, Table 4 (above) answers the question. Pamela described the following persons as Empowered, based on significant pure factor loadings (numbers in parentheses are factor loadings, decimals omitted): "Me as I am at work" (855), "Me as I would like to be/Ideal Self" (769), "Me as I am with my children" (782), "Me as I am in my Master's program" (780), "Me as I am with my husband" (611), "Me as most people see me" (829), "My father as he usually is" (756), "My brother as he usually is" (674) and "My husband as he usually is" (602).

The importance of Pamela's career seems obvious: Her description of herself at work and the self she wants to be (ideal self) are virtually the same description. She feels her work, educating children, is important. Her closest colleagues are allies, committed to the children and to each other. Children can be difficult, and part of the job is managing them, but if you do that well, children will understand that as caring. Her self description in her Master's degree program in education loads highly on this factor. Her friends in her education classes are also allies, so her description of herself as ideal in the eyes of others is supported in her daily reality. She sees herself as empowered with her children and her husband. She sees her father and brother as empowered. "Empowered" seemed the right term for this feeling. Pamela agreed.

Factor 3: Independent

This factor, labeled "Independent," describes a person with a strong feeling of deserving good things, validating the intention to demand good things for herself. For Pamela, this feeling is growing; her description of her future self, "Me as I'm becoming," loads purely on this factor.

Strongly agree distinguishing items are self centered, demanding of self, demanding of others, comfort-loving, selfish, idealistic, self knowing and attractive. Strongly disagree distinguishing items are submissive, way out, playful, lack of ability, unstable, changeable, gentle and amorous.

Who is who? Table 4 again provides answers. Pamela described her future self, "Me as I'm becoming" (659), and "My stepmother as she usually is" (631) in the same way, as Independent. Pamela was surprised to learn she'd described herself and her stepmother as alike. They two did not develop a close relationship for years, and Pamela's memories emphasize their differences. Facing the evidence, she realized how others might see them as much alike.

Pamela used the word "Independent" to describe the person she is becoming. I concurred.

Discussion

Although Pamela's factor interpretations are presented one by one, like scenes in a larger story, just by understanding the scenes you have a sense of the larger story. In a single case study, we can interpret factors as personal scenes in a larger personal story, because the voice expressed in the factors is always the voice of the same person, the references to life periods or events are always the recollections of one person, and the scenes can be arranged in chronological order. Some events and periods could be given actual dates and times. Our understanding of Pamela's feelings about self and evaluations of self can be integrated with a concrete, chronological story as recalled by Pamela, something like the following.

As a child, Pamela remembers her mother as always treating her lovingly. As a teenage girl, Pamela became frightened by her mother's alcoholism. Her father, an Army base commander, was embarrassed and increasingly angry at her mother. At home, Pamela took on cooking and childcare to relieve the stress in the family. Eventually her father divorced her mother, who moved to a distant state to live with relatives. Pamela insisted on living with her mother in order take care of her, but her father refused absolutely. With her mother gone, Pamela was invited by her father to act as hostess when he invited guests to their home. Pamela enjoyed that, especially dressing up, greeting and serving the guests. As an adult, Pamela recalled that she "felt like a queen." Soon her father met, courted and married a woman who at once became wife, stepmother and hostess at the commander's parties. She took charge of the household, the budget and the children. Pamela felt disregarded, powerless and frustrated.

Several theoretical conditions have been satisfied. Pamela's subjective processes (self feelings and judgements) have been integrated with life events (e.g., Pamela at 15 when her parents were divorcing, Pamela at 29 at her work). This satisfies Kantor's principle that psychological events happen in interactional settings (Kantor, 1951). It also satisfies Stephenson's principle that subjective events (feelings, beliefs, intentions) and volitional actions are part of the same fabric, that subjective behavior and objective observable behavior are one thing. Brilliantly, in Kantor's formula for a psychological event, he left out a function for time limits (Kantor, 1959). It's easy to put dates, times and durations on observable actions but not on subjective events. Kantor's function for

history in psychological events allows for recurring effects, that is, memory and learning. A case in point is Pamela's memory of the feeling we called "Adrift." The highest factor loading for that sort suggests that the period when her parents were divorcing epitomizes her "Adrift" response — frustrated, emotional, destabilized, loss of power and influence. The high (but not pure) loading of her real self sort on the Adrift factor confirms that the feeling is always ready for use, behind her growing feeling of empowerment, and running counter to her independent intentions.

In terms of Kantor's formula, Pamela's single case study yielded evidence for psychological events in three classes of interactional settings (career, marriage, children) of sufficient scope and importance to be identified as major life vectors that shape and focus how Pamela views herself and her relationships and in which Pamela has invested efforts and committed her action plans to manage and improve her life.

Evelyn in Person

Evelyn, the participant in the second study, was a student finishing a Master's degree and soon would start a career. She had accepted a job offer that would start after her graduation. Evelyn seemed generally positive, quick-witted, articulate and inventive.

Evelyn's Sort

Evelyn's sort (Table 6) would consist of characteristic behaviors, that is, sort items that express feelings ("I am deeply in love"), beliefs ("I carry many burdens from my past life") and intentions ("I want to be successful to please my family"). The statements would come from persons and situations that emerged in Evelyn's life interviews. Evelyn would write character profiles for each person, including first-person dialog to express each character. Evelyn wrote the dialog in first person, present tense, "to become the character during sorting."

Table 6. Evelyn's Sort — Characteristic Behaviors (Feelings, Beliefs, Intentions)

	Evelyn's Sort										
1	I hate being wrong, so I hate admitting being wrong. Often it's just a bad situation anyway.	2	I don't like to have power over others.								
3	I like being in control of my emotions.	4	The most important thing is for me to fight injustice.								
5	I really want to be physically fit, to enjoy staying in shape.	6	I hate the idea of leading a boring life.								
7	I want to do something no one else has ever done, to be different from the rest of the world.	8	I like to be funny, to make other people laugh.								
9	I love being around artists, around people who are creative.	10	I like to be around active people, to have my life influenced by interesting people.								
11	I feel confident, sure about my own judgments.	12	I have the courage to dismiss people who are trivial, foolish.								
13	I like being around people I don't have to worry about offending.	14	I enjoy appreciating the arts, the sensitivity it requires.								
15	I really have a temper. I can get very angry when things don't go right.	16	I live most of my life through others, vicariously.								
17	I often feel jealous, envious of others.	18	I categorize individuals instead of trying to understand them as individuals.								
19	I carry many burdens from my past life.	20	I'm usually not able to help with others' problems.								

<u> </u>	Evelyn	's Sor	t
21	I'm a little jealous of people who are beautiful. They get more attention and consideration than plainer looking persons.	22	I feel helpless, incompetent. I lack confidence in what I'm doing.
23	I have little interest in current events. They have little to do with my life, really.	24	I like being in large groups of strangers where I can be anonymous.
25	Playing well is one thing, but finally what matters is who wins and who loses.	26	Somehow, things never seem to go right for me.
27	I would enjoy having love affairs.	28	I like the excitement of taking physical risks.
29	I don't feel like I ought to like everyone. Nor do I feel that everyone ought to like me.	30	I fear that my obligations to others will prevent my doing what I really want to do in life.
31	I like to associate with people who have status.	32	I like people who are direct, who know where they stand.
33	I do not like being physical with people I love.	34	I feel that my family cares about me more than anyone else.
35	I feel desirable, attractive.	36	I like to laugh at myself occasionally. It's important not to take yourself too seriously.
37	Protocol is important. A set of rules can make life better in many situations.	38	I prefer a lover who is assertive, a decider.
39	I enjoy being surrounded by beautiful expensive things.	40	I would like to be successful to please my family.
41	I don't mind being "one down" in a romantic relationship	42	I prefer a lover with strong moral convictions.
43	I feel I have the courage to face tragedies in my life.	44	I am a very talented person, full of creative ability.
45	I think on my feet. I am clever and able to make use of a moment's opportunity.	46	I share energy and enthusiasm readily, even with strangers.
47	I have an abundance of energy and enthusiasm.	48	I don't get depressed. I don't believe in getting depressed.
49	I almost never feel fear. Fear is useless in dealing with problems.	50	I want to be a leader, the best in my field.
51	I want to retain some privacy, even in a love relationship.	52	I am really quite close with my money. I want it to spend on me, not on others.
53	I am a very tough, independent person, not easily hurt by other people.	54	I am a religious person, and I appreciate the security my religion offers.
55	Life is not really such a happy experience, so a cynical attitude is really a realistic attitude.	56	It's great sometimes to let your hair down, to let it all hang out, to drink enough to do some good.
57	I have firm beliefs that do not change when the situation changes.	58	One has to be aggressive about pursuing a career. Inevitably there will be people who stand in your way.
59	It's fun to wear dramatic clothing, something that catches eyes, that makes an impression.	60	I dislike advice. Other people can hardly know what it's like to be in my shoes.
61	I want many close relationships, to be wanted by many people.	62	I feel afraid to ask for advice. The other person may not want to help.
63	I am committed to my work and willing to give up many things to continue it.	64	I don't like being aggressive. Sometimes it's better to follow than to lead.
65	I have the endurance to weather hard times in pursuit of my career.	66	I do not like being pressured by others.
67	I believe homemaking can be creative and rewarding.	68	I want to work with people who are inspiring. That's really more important to me than the kind of work I do.
69	I don't really care that much about clothing. Clothing doesn't make the person.	70	In matters of taste, I feel confident, assured.
71	I am afraid I complain a lot. I don't have a very positive outlook on life.	72	I am a good story-teller. I can hold people's attention while I'm telling stories.

	Evelyn's Sort									
73	I am usually very good at judging the character	74	I feel jealous when others get more attention							
	and motives of others.		than I.							
75	I always respect the self-concepts of others.	76	I feel that my friends trust me and can confide							
			in me.							
77	I have no dream, so little to live for.	78	I want my family to care about me, to take a							
			deep interest in me.							
79	I am deeply in love.									
L		1								

Whereas Pamela completed 15 sorts, Evelyn would eventually complete 50 sorts. In addition to the same self theory sorts, Evelyn suggested numerous life situation sorts and sorts for numerous persons influential in her life, including family members, peers, famous persons, fictional characters and brand personas. The number of sorts grew because Evelyn kept adding new people she wanted to "become." I drew the line at 50.

Evelyn wrote profiles of characteristic behavior for all 50 persons and situations, which provided a concourse, and 79 characteristic behaviors were extracted to complete the sort. Evelyn's sorting followed this frequency distribution and scoring:

Disagree					Neutral						Agree			
Score	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	
Frequency	2	4	5	7	8	9	9	9	8	7	5	4	2	
							N = 70)						

Evelyn's Conditions of instruction

The 50 conditions of instruction that directed Evelyn's sorts included the same self theory instructions as in Pamela's study. New sort instructions were developed from Evelyn's life interviews. Evelyn nominated sorts for numerous life situations, family members, peers, famous persons, fictional characters and brand personas (Table 7).

Table 7. Evelyn's Conditions of Instruction

	Evelyn's Conditions of In	struction
1	Me as I really am	Self theory
2	Me as I'd like to be	Self theory
3	Me as others see me	Self theory
4	Me as I am becoming	Self theory
5	Me at 13 (summer art camp)	Life situation
6	Me at 18	Life situation
7	Me in love	Life situation
8	Me in my new job	Life situation
9	Me on my bike	Life situation
10	Me roughing it outdoors	Life situation
11	Me at church	Life situation
12	Me at a party	Life situation
13	Me at a high-class place	Life situation
14	Me as my car	Life situation
15	Me as an artist	Life situation
16	Me as an intellectual	Life situation
17	Me as a minister	Life situation
18	Mother	Family
19	Father	Family
20	Lee Gates (adopted sister)	Family
21	Abbie Davis (activist student)	Peer

Evelyn's Conditions of Instruction					
22	Kit Campbell (roommate)	Peer			
23	Joan Glass (MA student)	Peer			
24	Liz Lawton (MA student)	Peer			
25	Susie Good (MA student)	Peer			
26	Sunny King (MA student)	Peer			
27	Virginia Blue (secretary)	Peer			
28	Chuck Walker (liked professor)	Peer			
29	Harry Head (disliked professor)	Peer			
30	Mao (Chinese leader)	Famous person			
31	Richard Nixon (former president)	Famous person			
32	Ernest Hemingway (novelist)	Famous person			
33	Tennessee Williams (playwright)	Famous person			
34	Farah Fawcett (actress)	Famous person			
35	Miss Rosalyn (Romper Room TV host)	Famous person			
36	Wicked Witch of Oz (movie witch)	Fiction			
37	Captain Hook (<i>Peter Pan</i> , cartoon villain)	Fiction			
38	Ross Poldark (romantic Revolutionary War hero)	Fiction			
39	Peter Wimsey (gentleman detective)	Fiction			
40	Gregory Wilmot (in <i>Upstairs, Downstairs</i>)	Fiction			
41	Cary Grant (as movie angel Dudley)	Fiction			
42	Bette Davis (in <i>Dark Victory</i> death scene)	Fiction			
43	Blanche DuBois (in A Streetcar Named Desire)	Fiction			
44	Maude (in TV sitcom)	Fiction			
45	The Fonz (in TV sitcom)	Fiction			
46	Marlboro Man	Brand persona			
47	Fabulous Babe	Brand persona			
48	Virginia Slims character	Brand persona			
49	Revlon's Charlie	Brand persona			
50	Mr. Goodwin	Brand persona			

Interpretation

Factor analysis of Evelyn's 50 sorts produced evidence for 6 factors. The 6 factors were named "Constructive Independent," "Martyred Career Woman," "Ruthless Controller," "Dreamless Giver," "Dramatic Dreamer" and "Contented Lover." Evelyn participated extensively in the interpretation and named all the factors.

Factor 1: Constructive Independent

In the Constructive Independent, we see behavior that centers on strong desire, physical strength, confidence in the face of danger, bold movement and effortless performance. The evidence appears in Evelyn's defining behaviors (Table 8), behaviors at the sort extremes (strongly agreed with at the top, strongly disagreed with at the bottom) that most strongly distinguish this factor sort from other factor sorts.

Factor Analysis and Evelyn's Factor Structure

The same procedures used for Pamela's data were used for Evelyn's. The QUANAL program produced the factor structure seen in Table 9. Because Evelyn's sorts describe herself and other persons, and because the factor structure shows which persons loaded on which factors, this table can be used to answer "who is who" questions.

Table 8. Evelyn's Defining Behaviors - Constructive Independent

Constructive Independent								
#	+Z- score	+Z- Diff						
35	I feel desirable, attractive.	1.61	1.66					
11	I feel confident, sure about my own judgments.	1.59	2.10					
28	I like the excitement of taking physical risks.	1.50	1.75					
53	I am a very tough, independent person, not easily hurt by other people.	1.49	2.51					
45	I think on my feet. I am clever and able to make use of moment's opportunity.	1.11	0.90					
49	I almost never feel fear. Fear is useless in dealing with problems.	0.98	2.00					
57	I have firm beliefs that do not change when the situation changes.	0.90	1.70					
31	I like to associate with people who have status.	-1.02	-1.25					
37	Protocol is important. A set of rules can make life better in many situations.		-1.18					
25	Playing well is one thing, but finally what matters is who wins and who loses.	-1.23	-1.23					
19	I carry many burdens from my past life.	-1.69	-2.06					
64	I don't like being aggressive. Sometimes it's better to follow than to lead.	-2.05	-1.54					
22	I feel helpless, incompetent. I lack confidence in what I'm doing.	-2.12	-1.79					
16	16 I live most of my life through others, vicariously.							
#	Most Disagree	-Z- score	−Z- Diff					

Because Evelyn's sort items were expressed in first person, present tense, the defining behaviors for a factor read as a monolog; thus both Evelyn's intentions and our interpretation are straightforward. Here are Evelyn's defining behaviors verbatim: "I feel desirable, attractive. I feel confident, sure about my own judgments. I like the excitement of taking physical risks. I am a very tough, independent person, not easily hurt by other people. I think on my feet. I am clever and able to make use of a moment's opportunity."

Who is who? The persons Evelyn described as Constructive Independents are clearly defined by high, pure factor loadings in Table 9.

Table 9: Evelyn's Factor Structure/Who is Who?*

	Evelyn's Factor Structure						
Sort #	Condition of Instruction	Constructive Independent	Martyred Career Woman	Ruthless Controller	Dreamless Giver	Dramatic Dreamer (Artist)	Contented Lover
2	Me as I'd Like to be	675	214	057	-191	309	-023
43	Me on my bike	816	-219	-131	098	037	228
46	Me roughing it outdoors	744	-226	-206	127	-109	165
41	Me at a party	561	195	161	003	064	-031
45	Me at a high-class place	417	260	238	-174	082	-002
40	Me at church	(-555)	211	-245	218	-063	-177
15	Ernest Hemingway	813	136	080	-174	382	-068
6	Marlboro Man	804	-117	118	-107	-061	-033
39	The Fonz	766	-131	044	-143	110	-030
20	Abbie Davis (social activist)	751	065	-052	-130	090	027

Evelyn's Factor Structure								
Sort #	Condition of Instruction	Constructive Independent	Martyred Career Woman	Ruthless Controller	Dreamless Giver	Dramatic Dreamer (Artist)	Contented Lover	
13	Virginia Slims character	744	187	080	047	049	182	
5	Fabulous Babe	710	-122	-154	210	074	340	
14	Ross Poldark	706	189	097	-228	-030	-077	
7	Revlon's Charlie	692	318	030	-222	233	-038	
25	Chuck Walker (liked professor)	659	246	-050	-206	264	289	
28	Peter Wimsey	586	155	102	(-418)	146	-109	
38	Maude (TV character)	582	122	052	048	014	131	
33	Cary Grant (as movie angel)	537	086	-343	-119	-031	079	
29	Gregory Wilmot (Upstairs, Downstairs)	529	036	-185	-137	-004	116	
27	Mao (Chinese leader)	513	102	-215	(-420)	134	-079	
19	Farah Fawcett	428	-120	145	-138	-039	018	
23	Sunny King	494	459	-081	-228	261	260	
4	Me as I am becoming	145	818	073	-126	064	-184	
1	Me as I really am	-113	646	019	387	039	325	
3	Me as others see me	-186	636	-071	066	178	176	
11	Me in my new job	243	817	129	-126	232	-067	
48	Me as an intellectual	166	486	154	-334	-243	-194	
42	Me as my car	-340	574	136	-081	-014	-027	
44	Miss Rosalyn (Romper Room)	-052	088	859	-077	-122	-082	
32	Captain Hook	-069	012	798	000	262	-054	
37	Wicked Witch of Oz	272	-022	683	-222	-048	-129	
26	Richard Nixon	-268	190	562	110	126	-161	
17	Joan Glass (MA student peer)	248	188	528	-178	202	-109	
21	Harry Head (disliked professor)	-001	137	360	151	260	-158	
35	Susie Good	063	-068	354	-154	028	043	
50	Me as a minister	250	058	(-346)	-033	063	098	
18	Virginia Blue	-270	-100	800	693	012	-101	
22	Me at 18	041	-167	-193	693	058	-090	
10	Mother	-123	191	-090	572	-096	098	
49	Me in love	(-506)	-069	-121	562	095	064	
36	Blanche duBois (Streetcar)	(-711)	055	110	546	092	-113	
9	Lee Gates (adopted sister)	006	-301	274	489	-255	-068	
47	Me as an artist	166	053	155	139	850	049	
34	Tennessee Williams	033	069	800	-029	653	-040	
30	Liz Lawton (actress, friend)	220	275	362	-015	536	126	
8	Father	-063	-064	166	170	(-449)	032	
16	Mr. Goodwin (Crest Commercials)	-108	-019	-158	001	(-369)	053	
24	Kit Campbell (roommate)	169	-044	-208	-039	-009	776	
31	Bette Davis (in Dark Victory)	296	-013	-175	007	-066	474	
12	Me at 13 (summer art camp)	160	373	-012	-032	457	447	

*Conditions of instruction are organized by factor. Significant loadings have gray highlights. Negative significant loadings appear in parentheses. Decimal points are omitted. In the first column, grey highlights denote sorts based on self theory. The names for all peers (persons Evelyn knows personally) are pseudonyms. The sort "Me at church" is the only sort having no significant positive loading, yet it takes its place in the factor solution with a strong negative loading on the Constructive Independent factor, amid positive loadings for persons who present strong personalities. In projections, Evelyn characterized "Me at church" as "a nonentity," feeling serene and "neither sad nor happy" because "in church there is nothing to fear because God will protect me." The highest loading for "Me as a minister" is also a negative loading, but on the Ruthless Controller factor. Although negative loadings are often interpreted as evidence of logical opposites, it is usually important to interpret negative loadings as emotional "opposites."

The strength of each factor loading (decimals omitted) measures how well the Constructive Independent factor array fits each person's description: "Me as I'd like to be" (675); "Me at a party" ("anonymous and dressed to kill") (561); "Me on my bike" ("my sister said I would kill myself") (816); "Me roughing it outdoors" (744); "Me at a high-class place" (417); Abbie Davis ("my best friend; we are different as night and day") (751); Chuck Walker, a professor ("who throws himself into everything he does" and "makes me more optimistic about my life") (659); Ernest Hemingway (813); Mao (513); Marlboro Man (804); the Fonz, cool sitcom hero, (766); Virginia Slims brand persona ("You've come a long way, baby") (744); Fabulous Babe, Fabergé brand persona (710); Ross Poldark, hero in romantic novels (706); Revlon's Charlie, first black woman as major fashion brand persona (692); Peter Wimsey, fictional British detective (586); Maude, feminist TV character (582); Cary Grant, as movie angel Dudley (537); Gregory Wilmot, a lead in *Upstairs, Downstairs* (529) and Farah Fawcett, as the *Charlie's Angels* television star (428).

Evelyn's Constructive Independent seems much the same as Pamela's Empowered self, yet their sources of inspiration differ. Whereas Pamela's empowerment model seems to be her father (Table 4), Evelyn's empowerment models lies in neither parent but in inspiring peers and heroic examples among famous persons and fictional heroes. Evelyn's aspirations lead her away from her parents. Pamela and Evelyn differ in stages of life development. Pamela's empowered self appears at work, as well as with her children and husband. Such life situations are not yet part of Evelyn's experience. Evelyn's empowered self appears in play — at a party, riding a bike, roughing it outdoors and at a high-class place. Pamela feels empowered in her career, but Evelyn, in spite of having jobs in the past, sees her career as not yet launched, and she hopes for an inspiring mentor. As a social matter, both Pamela and Evelyn expect their careers to define the way others will see them. Neither one had mothers with careers.

Factor 2: Martyred Career Woman

In the Martyred Career Woman, we see Evelyn's determination to build a career. As she looks ahead, this means buckling down, exerting control over her emotions and following others whom she hopes will be inspiring. For now her feelings about pursuing a career are based more in obligation than excitement. In choosing the term "martyr" for this factor, Evelyn wishes sympathy for this young woman who must renounce youthful freedom to make her way in the hard cold world. The "martyr" feels a bit sorry for herself and makes the point with irony.

The defining behaviors are "I am dedicated to having a career"; "I want to be successful, I owe that to my family"; "I will give up things to continue on and to succeed. To do that I must control my emotions, my fears and passions"; "I want to work with people who are inspiring. That's really more important to me than the kind of work I do" and "I can see myself in success, impressively dressed and surrounded by beautiful expensive things."

Who is who? (See Table 9.) Evelyn described these persons as Martyred Career Women: "Me in my new job" (817); "Me as I really am" (646); "Me as I am becoming" (818); "Me as others see me" (636); "Me as an intellectual" (486) and "Me as my car" (always dependable; it always gets you where you want to go) (574). This person, the "martyr" who buckles down, who is dependable (like her car), is the person Evelyn sees as her real self, the self she is becoming, and the self as others will see her. All descriptions of the Martyred Career Woman are descriptions of Evelyn herself. None of her peers, family members, her heroes or villains load on this factor. This is new ground for Evelyn. She said, "This feels lonely." Evelyn, in beginning her career, sees herself as a dependable follower, hoping for an inspiring leader. By contrast, Pamela, with an established career, sees herself, empowered at work, as a current reality.

Factor 3: Ruthless Controller

In the Ruthless Controller, Evelyn depicts a person out to win, whatever it takes. Yet Evelyn sees "win at any cost" behavior as threatening, even as villainy.

The defining behaviors are "When somebody wins, somebody else can lose"; "You have to do what works, because it matters who wins"; I intend to win, to do my job." In this factor, you can't stop to understand every issue for every individual, so procedure and protocol helps. Sometimes people are just not on board. When things don't go right, you may have to watch your temper, but you still have to be assertive. The goal is to win.

Who is who? (See Table 9.) Evelyn described these persons as Ruthless Controllers: Rosalyn, the "scary" live host of *Romper Room* (859); Captain Hook, enemy of Peter Pan (798) and the Wicked Witch of Oz (683) — all childhood memories. That was also her feeling about Joan Glass, a classmate (528); Susie Good, another classmate (354); Harry Head, an intimidating professor (360) and resigned president Richard Nixon "in the David Frost interview" (562). None of Evelyn's self descriptions load on this factor. She does not see herself as tough or demanding.

Factor 4: Dreamless Giver

This factor reveals a person who subjugates herself to others, who puts the wishes of others above her own, a helpless person burdened by obligations. She gives readily of herself but loses as a result. Evelyn's description of Blanche DuBois in *Streetcar Named Desire* loads purely on this factor.

The defining behaviors are "I have no dream, no ambition, so little to live for"; "I carry many burdens from my past"; "I feel helpless, incompetent"; "I lack confidence in what I'm doing"; "I lack endurance"; "I live most of my life through others, vicariously"; "I fear my obligations to others will prevent my doing anything I really want to do in life"; "Somehow, things never seem to go right for me"; "I share energy with others, even with strangers, and then feel deflated, depressed."

Who is who? (See Table 9.) Evelyn described these persons as Dreamless Givers: "Me at 18," entering college (693); her mother (572); Blanche DuBois in *A Streetcar Named Desire* (546); Lee Gates, her adopted sister (489); Virginia Blue, a secretary whom Evelyn befriended (693) and "Me in love" (562).

Evelyn equates feeling in love with one-sided commitment. She said, "When I'm in love I just give myself away. I don't keep anything for myself. I hate being in love, so I avoid being in love." Evelyn's Dreamless Giver description seems similar to Pamela's Adrift description. Both expose feelings about personal flaws and frustration and about burdened commitment, yet the motives differ. Evelyn's real self is not Dreamless Giver but Martyred Career Woman, committed to career, who must avoid love because she overcommits.

By contrast, Pamela describes her real self as Adrift, a feeling of disempowerment and vulnerability based in past events. Clearly the feeling is not erased, yet the factor loadings (Table 4) show that the feeling is strongest in Pamela's self description at age 15, weaker when she started college, and weaker still in her current real self description.

Factor 5: Dramatic Dreamer

In the Dramatic Dreamer, Evelyn imagines herself as an artist, living a life of intensity, "giving up anything to express my talent." For Evelyn, the Dramatic Dreamer is a fantasy "because you cannot direct life as you would a play." Yet she recognizes that real people have lived, for periods at least, with such intensity, as she did as a blissful 13-year-old actress at summer art camp.

The defining behaviors are "I want to be a leader, the best in my field," "I want to do something no one else has ever done, to be different from the rest of the world," "I am a very talented person, full of creative ability," I love being around artists, around people who are creative," "I try to understand each person, to see each person as an individual," "I enjoy appreciating the arts, the sensitivity it requires," "I am flexible. I can change my views, situation to situation," "I feel free, not bound to others by obligations."

Who is who? (See Table 9.) Evelyn described these persons as Dramatic Dreamers: "Me as an artist" (850); "Me at 13 (at summer art camp)" (457); Tennessee Williams, author (653) and Liz Lawton, a classmate friend (536). With the Dramatic Dreamer, Evelyn associates surprising clothing, rich colors, talk about books and plays and love affairs filled with passion and anger. On this factor, we find Evelyn's father, whose highest and pure loading on this factor is negative (-449), the opposite of Evelyn as artist.

Factor 6: Contented Lover

In the Contented Lover, Evelyn accepts her life, in the moment, just as it is, letting go of anything serious or impending. She loves this life. She feels contented. This feeling is epitomized in her interactions with a sanguine roommate and, surprisingly, in a death scene from a classic movie.

The defining behaviors are "I am deeply in love," "I will be positive," "I put away all considerations of meanness, of aggression, cynicism, of who's the leader or who's the follower," "I won't take myself seriously," "For once, I won't think about my career," "My appearance is not important. I will wear whatever I want," "I will be funny. I will make someone laugh. I will laugh at myself," "To do this, now and then I have to be close with my money so I can spend some on myself" and "I have to remember that family cares about me, more than anyone else."

Who is who? (See Table 9.) Evelyn described two persons as Contented Lovers: Kit Campbell, her roommate and friend (776) and Bette Davis in the death scene from *Dark Victory* (474). Evelyn associates Kit with relaxing meals after long days, conversations about nonessentials, in fact refusing to talk about anything serious and becoming silly and giddy. In *Dark Victory*, Bette Davis portrays a socialite who learns she is terminally ill. The illness progresses with the story until the climactic scene in which she surrenders to fate and makes her last act an act of love for her husband. In the midst of striving, of difficulty, of hardship, you can surrender and choose to love life for itself.

Discussion

Evelyn's study yielded 6 factors, twice the number in Pamela's study. Just as Pamela's 3 factors revealed scenes in a larger life story, Evelyn's 6 factors reveal a richer, more

complete picture of Evelyn's life story. We attribute Evelyn's larger number of factors to the larger variety of persons and situations she described, not merely to the larger number of sorts. Because we've interpreted key life events for Pamela, we can, at a summary level, compare Evelyn's life events and intentions with Pamela's.

Evelyn and Pamela show themselves in different life stages. Evelyn's life stage is characterized by a focus on personal development and friends, by not being in a romantic relationship, and by intense focus on starting a career. Pamela has advanced to a more established life stage, having an established career, a marriage and children. Clearly her career and personal development are sustaining matters of emotional commitment and intentional focus. Pamela's life seems established. She is committed (often she feels overcommitted). She feels invested and vested (with job experience, a good reputation, a staff and a budget to manage). Pamela's career is established; her ideal self is bound to her career.

Evelyn's career is not yet established, so she's not yet invested nor vested, but her career is currently the central issue in her life. Her motives, expressed in the Martyred Career Woman sorts, express both personal requirements and a family promise. That makes her career an intense matter of social control. She feels trepidation. She's hoping for an inspiring mentor. Much lies in her near future.

Evelyn's ideal self, with all her Confident Independent power and decisiveness, must be suppressed for now. She cannot attack her career as she rides her bike, boldly, even recklessly. She cannot play the artist; artist behavior is too risky, too voracious. She *can* have friends and giddy food fights, a bright spot. Decidedly, Evelyn needs an inspiring mentor at work so her dependable martyred working self can blossom into a credible, effective professional. The hope is there, and during factor projections, Evelyn imagined herself, like Pamela's Independent self, becoming successful and rewarding herself with clothing and jewelry. In the same factor projections, Evelyn asserted that she shopped for different clothing items in different stores for the Martyred Career Woman and the Constructive Independent.

Conclusions

Q researchers frequently use the language of stories, especially story structure, to communicate about Q findings and their practical and theoretical implications. Stories are made up of episodes and scenes, plots and story lines, actors and roles, discourse and dialog and monolog and so much more.

Every factor in every Q study reveals scenes in a larger story. In single case Q studies, the story form is autobiography, with the scenes and episodes part of a bigger personal story, the subject's life story. The perspective of the story is retrospective, and the storyline is a roadmap from early promise through challenges to the present. The life situations recalled serve as life landmarks and markers.

Self Theory

The self-theory probes (real self, idea self, generalized other and future self) lived up to expectations in that they were of clear value in interpreting the factor structure, especially relationships among key characters and how episodes fit into the larger story.

The theories also enable us to compare interpretations across studies. Pamela's ideal self and Evelyn's ideal self seem cut from the same cloth; "Empowered" is an appropriate interpretation for either factor. Pamela's Adrift is much like Evelyn's Dreamless Giver, both reflecting one-down relationships in which Pamela and Evelyn feel pressured to concede interpersonal precedence to others. Evelyn's Dramatic Dreamer seems an amped-up version of Pamela's Independent. Both are about

acquiring things to please yourself. Pamela's Independent, however, seems socially metered, justified by achievement or status. Evelyn's Dramatic Dreamer, by contrast, is passionate and risky, justified by one's talent, presence and audacity.

The self-theory probes focus attention and analysis, by the scientist and the subject in collaboration, on most important learning opportunities — understanding the subject's significant relationships and the emotional role of significant life events.

Social Influence

Social influence appears to be everywhere at issue, in most scenes and in every larger life story, as anticipated by Stephenson's theory of social control and convergent selectivity (Stephenson, 1967). Evelyn provided one factor, however, the Contented Lover, entirely comprised of sorts that capture scenes that satisfy Stephenson's description of convergent selectivity, of letting go of pressure to satisfying anyone else, and in Evelyn's examples, at least, accompanied with feeling in love. The key personal scene involves Kit Campbell, a roommate who, at the end of long days, shared relaxed evenings with Evelyn. Their pact was never to talk about anything serious and to play: "We just played. We sometimes had food fights. We'd get silly and giddy."

Number of Factors

Pamela's study produced 3 factors, and Evelyn's study produced 6 factors. The value of having more factors is apparent. In studies with multiple participants, more factors mean more actors to better explain story dynamics, how relationships cooperate or clash and proceed. In single case studies, more factors mean you have more scenes to fulfill the subject's life story.

The most important driver was the number of conditions of instruction. Pamela's trait items could reasonably have been used to describe many different phenotypes, but 15 conditions of instruction (15 sorts) allows fewer possibilities. All 15 sorts had significant loadings, and only one had significant loadings on multiple factors.

In the Evelyn study, using 50 sorts created the possibility for getting more factors. The actual distribution of significant pure loadings on factors shows we had far more Constructive Independent sorts than needed. What got us the other five factors was the variety of persons and scenes in Evelyn's memory and her persistence in doing sorts. The strategy in Q of factoring persons insulates our results from P-set statistical distribution issues across the columns.

Table 10. Distribution of Sorts with Significant Loadings by Factor

Constructive Independent	Martyred Career Woman	Ruthless Controller	Dreamless Giver	Dramatic Dreamer (Artist)	Contented Lover
21 sorts	6 sorts	8 sorts	6 sorts	4 sorts	2 sorts

In closing, I recommend two classic single case studies published in *Operant Subjectivity*. "Self in everyday life" (Stephenson, 1992, 2006) is a single case study that used the same self theory conditions of instructions used with Pamela and Evelyn. The author was both the subject and the scientist in this study of a specific life period, the retirement of the author. The sort was a "theoretic" sort, drawn from assertions about how people present themselves to others, in contrast to Evelyn's "ecological" sort, drawn from the Evelyn's own spontaneous discourse. A 3-factor solution emerged in this completely autobiographical study.

"Intentionality: Or how to buy a loaf of bread" (Stephenson, 2006) is a single case study focused on a recurrent routine episode, buying a loaf of bread. The sort was "ecological" and structured to fulfill Kantor's classic formula for a psychological event. Three factors emerged. The factor analysis parses a routine, even boring, consumption process and reveals three coherent (reasonably orthogonal) perceptual, emotional, logical scenes in a larger coherent life story: (1) an elderly man is running through his mind his beloved wife's criteria for buying daily bread so he can satisfy her wishes; (2) the man is feeling comfortable with his familiarity about the bakery's staff and procedures as he selects bread he and his wife will enjoy and (3) the man is musing about social occasions where bread plays a leading role, where abundance of choice matters and cost for once is ignored. He relives a specific moment when he first felt that way, on his honeymoon, when a delightful and extravagant array of breads for a single meal was spread before him and his new bride.

References

Allport, G., & Odbert, H. (1936). *Psychological Monographs*, cited in *Oxford Dictionary of Psychology*, p. 774.

Cattell, R.B. (1945). Principal trait clusters for describing personality, *Psychological Bulletin*, *42*, 129-161.

Cooley, C.H. (1922). *Human nature and the social order* (revised ed.). New York: Charles Scribner's Sons.

Eysenck, H.J., & Eysenck, M.W. (1985). *Personality and individual differences: A natural science approach*. New York: Plenum.

Eysenck, H.J. (1967). The biological basis of personality, Springfield, IL: Thomas.

Goffman, E. (1959). *The presentation of self in everyday life*. New York: Doubleday.

Jung, C. (1973). *The psychology of the unconscious*. Tel-Aviv: Dvir Co., Ltd.

Kantor, J.R. (1959). *Interbehavioral psychology: A sample of scientific system construction*. Bloomington, IN: Principia Press.

Kantor, J.R. (1959). *Psychology & logic.* Bloomington, IN: Principia Press.

Maslow, A. (1968). *Towards a psychology of being*. New York: John Wiley & Sons.

Matthews, G., Deary, I.J., & Whiteman, M.C. (2003). *Personality traits* (2nd ed.). Cambridge: Cambridge University Press.

Mauldin, C. (1985). Evelyn in person. Paper presented at the Annual Q Conference, International Society for the Scientific Study of Subjectivity, Columbia, MO.

Mauldin, C. (2013). Pamela according to Pamela. Paper presented at the Annual Q Conference, International Society for the Scientific Study of Subjectivity, Amsterdam.

Mead, G.H. (1934). Mind, self, and society. Chicago: University of Chicago Press.

Rogers, C. (1959). A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science.* Vol. 3: *Formulations of the person and the social context.* New York: McGraw Hill.

Stephenson, W. (1953). *The study of behavior: Q-technique and its methodology*. Chicago: University of Chicago Press.

- Stephenson, W. (1967). *The play theory of communication*. Chicago: University of Chicago Press.
- Stephenson, W. (1992). Self in everyday life. *Operant Subjectivity*, *15(2)*, 29-55. (Originally Chapter 6 in a collection of unpublished papers titled *Operant Subjectivity: Quantum Theory and Newton's Fifth Rule*).
- Stephenson, W. (2006). Intentionality: Or how to buy a loaf of bread. *Operant Subjectivity*, 29 (3-4), 122-137.
- Stephenson, W. (2011). Old age research. Operant Subjectivity, 34(4), 217-233.
- Zechmeister, E.B., Chronis, A.M., Cull, W.L., D'Anna, C.A., & Healy, N.A. (1995). Growth of a functionally important lexicon. *Journal of Reading Behavior*, *27*(2), 201-212.