

Chapter 16

Biological Priority, Psychological Supremacy

Abstract: The concepts of continual creation, mutual feedback and biological priority and psychological supremacy offer concrete strategies for salutary interventions in clinical and educational practice. It also affords an approach to collective health, which is the most important scientific concern of our times, as increasing violence demands a change from conflictual thinking to co-creation, and from hierarchical states and corporations to personalized systems co-created by bi-directional relations of mutual and bipolar feedback.

Biotic dynamics (conservation plus bipolar, mutual and hierarchical feedback) provides new foundations for new theory in medicine, sociology, and psychology. Our group is pursuing their development. Some ideas regarding clinical¹ and social² applications have been explored in previous publications.

¹ Sabelli, H. and Carlson-Sabelli, L. (1989). Biological Priority and Psychological Supremacy, a New Integrative Paradigm Derived from Process Theory. *American Journal of Psychiatry* 146 1541-1551. Sabelli H. C., Carlson-Sabelli L., Javaid J. I. (1990). The Thermodynamics of Bipolarity: A Bifurcation Model of Bipolar Illness and Bipolar Character and Its Psychotherapeutic Applications. *Psychiatry: Interpersonal and Biological Processes*. 53:346-367; Sabelli, H. C. and Carlson-Sabelli, L. (1991). Process Theory as a Framework for Comprehensive Psychodynamic Formulations. *Genetic, Social, and General Psychology Monographs*. 117:5-27. Sabelli, H., Carlson-Sabelli, L. and Messer, J. (1994). The Process Method of Comprehensive Patient Evaluation Based on the Emerging Science of Complex Dynamical Systems. *Theoretical and Applied Chaos and Nursing*. 1: 33-41. Sabelli, H. C., Carlson-Sabelli, L., Patel, M., Zbilut, J., Messer, J., and Walthall, K. (1995). Psychocardiological portraits: A clinical application of process theory. In *Chaos theory in Psychology*. F. D. Abraham and A. R. Gilgen (Eds). Greenwood Publishing Group, Inc., Westport, CT. pp 107-125. Sabelli, H., Carlson-Sabelli, L., Patel, M and Sugerman, A. (1997). Dynamics and psychodynamics. *Process Foundations of Psychology. J. Mind and Behavior* 18: 305-334.

² Sabelli, H. C. and Synnestvedt, J. (1991). *Personalization: A New Vision for the Millennium*. Chicago, IL: Society for the Advancement of Clinical Philosophy (SACP). Sabelli, H. C., Plaza, V., Vázquez, A., Abaira, C., and Martinez, I. (1991). *Caos Argentino: Diagnóstico y Enfoque Clínico*.

16.1 Biological Priority and Psychological Supremacy in Medicine

Cardiovascular illness exemplifies hierarchical and bi-directional feedback among biological, social and psychological processes. A case study is outlined elsewhere.³ Beyond medication, current practice focuses on exercise and diet, which are largely determined by social and psychological processes that are not addressed. Competition, anger, and rushing contribute significantly to coronary artery disease; cardiological care seldom attends to these aspects, and most studies focus on the personality of the cardiac patient to the exclusion of the patient's social context. Yet, we live in a society that enforces, promotes and even celebrates competition, in the midst of social conflicts that propagate anger and an economic environment that imposes rushing to increase profits. Personality differences may make some individuals more susceptible than others, but the social environment affects us all. Acknowledging the predominantly social and cultural origin of emotional processes in cardiac illness is scientifically honest and will help to change cultural traits that promote illness. Focusing on individual psychology blames the victim and does not solve the problem. Learning about social influences may help individuals avoid them, for instance, by changing jobs. Individuals should not be forced to wait until social issues are solved to protect their own life, and in fact their individual action may contribute to social change (see section 16.8).

Chicago, IL: SACP. Sabelli, H. and Carlson-Sabelli, L. (1995). From social atoms to multinational processes. Must Cinderella live among the ashes? *Systems thinking, Government Policy and Decision Making. Proc. International Systems Society* Edited by B. Bergvall-Kareborn pp. 815-826. 114. Sabelli, H. and Carlson-Sabelli, L. (1995). How can Cinderella have her prince? Choosing to diversify social power. *Proc. International Systems Society* p 827-838. Sabelli, H. and Sugerman, A. (2002). Life-Long Creation in the Prevention Of Premature Aging. *Kybernetes*. 32: 778-787, 2003. Sabelli, H., Patel, M., Carlson-Sabelli, L., Konecki, J., Nagib, J., and Sugerman, A. (2003). Aging and Social Systems *Kybernetes*. 32: 767-777; Sabelli, H. (2003). Hipótesis y propuestas para un desarrollo creativo. In E. Herrscher. *Pensamiento Sistémico*.

³ Sabelli, H., Carlson-Sabelli, L. and Messer, J. (1994). The Process Method of Comprehensive Patient Evaluation Based on the Emerging Science of Complex Dynamical Systems. *Theoretical and Applied Chaos and Nursing* 1: 33-41; Carlson-Sabelli, L., Sabelli, H. C., Patel, M., Messer, J., Zbilut, J., Sugerman, A., Walthall, K., Tom, C. and Zdanovics, O. (1995). Electrophysiocardiography. Illustrating the Application of Process Methods and Chaos Theory to the Comprehensive Evaluation of Coronary Patients. *Complexity and Chaos in Nursing* 2: 16-24.

A dramatic example is the abandonment of breast-feeding in the rich countries (on the advice of their pediatricians) and in poor countries (as advertised by employees of corporations disguised as nurses⁴).

The concept of biological priority and psychological supremacy⁵ provides a bio-socio-psychological method for psychosomatic medicine and a strategy for a systemic approach to medicine and psychiatry.⁶ The hierarchy is dynamic. For instance, restoring breathing always has absolute priority, but once life is not threatened, taking care of the patient's emotional well-being may become more important than treating a respiratory difficulty. Conversely, attending to the psychological welfare of a dying patient has absolute supremacy.

Whether in medicine or psychiatry, insight into biological issues has priority. A patient who denies the meaning of pain will not seek the needed treatment; likewise, a patient suffering from a genetically determined affective disorder cannot be adequately treated unless he or she is aware that it is a medical illness. Therapists who promote "insight" into hypothetical unconscious reasons, childhood traumas or current

⁴ Two of the world's largest producers of powdered baby milk, are currently breaking a World Health Organisation Code on the marketing of breast milk substitutes. Nestlé and Wyeth provide free milk to maternity hospitals in the Third World so that newborn babies are routinely bottle-fed and do not learn to suckle well. The baby is then dependent on artificial milk. When the mother and baby leave hospital, the milk is no longer free. At home parents are forced to buy more milk, which can cost 50% of the family income. Because the milk is so expensive the child is not fed enough. This leads to malnutrition. The water mixed with the formula is often contaminated. This leads to diarrhea, malnutrition and often death. James Grant, Executive Officer of UNICEF, has said: Every day some 3,000 to 4,000 infants die because they are denied access to adequate breast milk. 1.5 million babies die every year from unsafe bottle feeding. Breast feeding is free and safe and protects against infection - but companies want to do business.

⁵ Sabelli, H. C. and Carlson-Sabelli, L. (1989). Biological Priority and Psychological Supremacy, a New Integrative Paradigm Derived from Process Theory. *American Journal of Psychiatry* 146(12):1541-1551.

⁶ Psychosomatic medicine pioneered the integration of biological and psychological care but ignored the social aspects of health, and it was biased by psychoanalytic interpretations. Systems theory went further [Grinker, R.R.(1975). The relevance of general systems theory to psychiatry. In *American Handbook of Psychiatry*, 2nd ed., vol 6, S. Arieti (Ed). New York: Basic Books, Inc; Marmor, J. (1983). Systems thinking in psychiatry: Some theoretical and clinical implications. *American Journal of Psychiatry* 140:833-838; Engel, G. L. (1980). The clinical application of the biopsychosocial model. *American Journal of Psychiatry* 137:535-544; Pribram, K. H. (1981). The neurobiologic paradigm. In *Models for Clinical Psychopathology*, C. Eisdorfer (Ed). New York: Spectrum Publications] but it does not provide guidelines regarding the sequence in which problems are to be treated. On the basis of systems theory, Engel proposed a sequential bio-psycho-social approach, while Pribram advocated that treatment can start at any point, since to change any part is to change the whole [Abroms, E. M. (1983). Beyond eclecticism. *American Journal of Psychiatry* 140:740-745].

family conflicts, while denying the importance of biological causes, prevent insight. Biological insight must be complemented with social and psychological insight. In clinical practice, we increasingly witness patients with the emotional consequences of unemployment, job insecurity, marital conflict, or childhood abuse being treated with antidepressants. Family therapy should be employed frequently in recognition of mutual feedback among family members.

Social causes should be given great weight in all medicine in general. Conversely, biological issues should be given priority in social matters. Infant mortality measures the health of a society, and the values of its members. The facts presented in Fig. 16.1 speak for themselves. The problem is that children are a large constituency, even a majority, but not an effective majority. (The same phenomenon occurs regarding classes; the middle class, rather than the workers, may be the effective majority.)

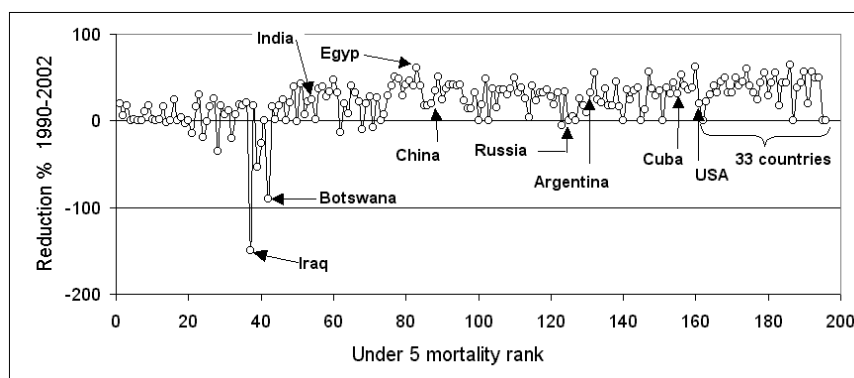


Fig. 16.1 Infant mortality rank in 2002 [(horizontal axis: from highest (left) to lowest (right) mortality], and average reduction since 1990 (vertical axis: decrease mortality upward, increase mortality downward). Note that these data precede the Iraq war.

16.2 Bipolar Feedback, Roles, Systems and Individuals

Social and psychological processes are driven by multiple systems of mutual feedback. A person has multiple roles (e.g. worker, father, reader, patient), which are first social and then personal. Social roles are not

external. The self is the sum of these roles.⁷ Thus the self is co-created by each person and by the others that constitute her/his world. A lady is not a lady because of the way she behaves, but because of the way she is treated, noted George Bernard Shaw. A person performs not only multiple roles but also contradictory ones. Consider for instance the class role of a poor woman married to a rich man, or the national feelings of immigrants. This is an important issue regarding social issues.⁸

Persons are interchangeable modules regarding social roles. Social roles embody numerical archetypes, as age stages are experienced by everyone, sexes are two, classes invariably include three strata, and further differentiations, including personal uniqueness, are created. Social roles occur in pairs, in which the meaning of each member depends on its complementary opposite (woman and man, parent and child, teacher and student). Social processes precede the development of personal individuality in the history of the species, of the human species, of each person, and of each relation. Social and familial processes are simpler and precede the personal (psychological) level; there are many more individual personalities and life histories than the relatively small number of social roles. As a totality, society has greater energy and complexity than individuals (priority), but each individual mind has greater energetic and informational density (supremacy). The social and the psychological levels thus relate in opposite ways as processes and as systems.⁹ This illustrates the duality of lattice order. The interaction between these two orthogonal hierarchies of complexity is creative. The society is simpler than the individual it creates. The creativity of individuals increases the complexity of the collective, which may then in turn generate more complex individuals.

The most fundamental roles are biological –age and sex—but other social roles are also assigned to us before we develop as individuals.

⁷ Moreno, J. L. (1978). *Who Shall Survive?* Beacon, NY: Beacon House.

⁸ A social theory based on role rather than class has not been developed as yet, but some ideas are sketched in *Union of Opposites*.

⁹ Postulating that social and familial processes are simpler and precede the personal (psychological) level; the process perspective is congruent with sociobiological and sociological theories (Marxist as well as non-Marxist). In contrast, systems theories and psychoanalysis consider psychological processes more fundamental and regard social processes as the result of the collective interaction between individuals.

Likewise, before knowing each other as individuals, persons face each other as a function of their respective roles; different persons may replace one another regarding social roles (generation, sex, profession, etc). We are members of society before we are individuals. In biological evolution, social species (ants, birds) antedate psychologically-minded humans. Humans began their history as animals with a rich social behavior.¹⁰ Only later does a psychological self emerge. Biological and social roles have priority, but personal processes eventually gain supremacy, for it is in the development of personal uniqueness that creativity comes into being. Psyche creates culture. It seems absurd to have to say it, but creativeness can even be demonstrated through the mathematical analysis of patterns (Fig. 16.4). Psyche exceeds culture: institutions develop their own culture, but do not develop consciousness or conscience. Consider, for instant, breast-feeding as discussed in section 16.1.

Feedback is diverse, not limited to opposition. The coexistence of two pairs of opposites (e.g. age and sex) implies four classes, and each pair always implies a third and sometimes a fourth; e.g. son and daughter vis a vis mother and father; enabler vis a vis abused and abuser. Every individual further interacts with many others. The system has priority over the individual. The biosphere precedes the species, the species precedes society, society precedes family, and family begets the individual. Systems create individuals, not vice versa. This fact has two important implications. First, we cannot understand human psychology without attending to social organization, roles and ideologies. For instance, one cannot understand human psychology without attending to economics; since economics is ignored by all major psychological theories, it is necessary to develop entirely new psychodynamic theory. Second, the individual is more complex than the system. This indicates that social progress may be expected from the personalization of society rather than from the socialization of individuals, albeit both processes occur in parallel. Personalization and socialization constitute a bipolar feedback process, in which each reinforces and reduces the other.

¹⁰ Lack of social solidarity is not psychological independence of mind. It is sociopathy. Illustrating the frequent rise of sociopathic individuals to positions of power, a well-known twentieth century female prime minister stated that there is no society, only individuals.

It is cogent to distinguish the notions of role, class, personal world, and system. Nations are systems. Classes are categories of persons with similar roles; rarely do they function as systems. Personal worlds are “networks”. Family and personal “networks” are not systems separated by boundaries,¹¹ but overlapping nets of interactions centered on one person. Each person, like a solar system (Chapter 9), has a material core (person), a wider “planetary” field of energetic relations (family, friends, coworkers, community), and an even wider domain of persons with whom he or she communicates, a social communication network that exceeds his life tenure. Family and personal “networks” are not systems separated by boundaries, but overlapping nets of interaction centering in each person. Personal systems, such as families, do not have boundaries that separate them from others, but they constantly evolve through marriage, births and deaths. Instead of boundaries, there are fields of interaction, and mutual feedback. Thus replacing the concept of “family system” has many psychotherapeutic implications;¹² while the system's concept of family homeostasis implies that improvement of one member will be compensated by the deterioration of another, the process notion of similarity of opposites implies parallel improvement.

16.3 Bipolar Feedback in Psychological Development

The biotic model of psychological development is based on and opposed to the dialectic model advanced by psychoanalyst Erik Erikson.¹³ Erikson proposed that humans develop in predetermined stages, each consisting of a contradiction of opposites that is eventually resolved in dialectic

¹¹ The distinction has practical implications. The systems' concept of family homeostasis implies that improvement of one family member will be compensated by the deterioration of another; the notions of co-creation and similarity of opposites implies parallel improvement. (Sabelli, H. (1989). *Union of Opposites*. Lawrenceville, VA: Brunswick; Sabelli, H.C. and Carlson-Sabelli, L. (1991). *Process Theory as a Framework for Comprehensive Psychodynamic Formulations*. *Genetic, Social, and General Psychology Monographs* 117:5-27)

¹² Sabelli, H. (1989). *Union of Opposites*. Lawrenceville, VA: Brunswick Publishing; Sabelli, H. C., and Carlson-Sabelli, L. (1991). *Process Theory as a Framework for Comprehensive Psychodynamic Formulations*. *Genetic, Social, and General Psychology Monographs*. 117: 5-27; Carlson-Sabelli, L., Sabelli, H. C., Patel, M., Holm, K. (1992). *The Union of Opposites in Sociometry: An Empirical Application of Process Theory*. *The Journal of Group Psychotherapy, Psychodrama and Sociometry*. 44(4):147-171

¹³ Erikson, E. H. (1982). *The Life Cycle Completed*. New York: W. W. Norton.

synthesis, allowing the development of a new phase characterized by a new opposition. As in other dialectic models, development is viewed as a linear sequence. The first psychosocial stage, experienced in the first year of life, deals with trust and mistrust. Integrity versus despair is the final developmental stage, which individuals experience during late adulthood. Erikson regards one side of each dichotomy as positive.

The co-creation model regards psychological oppositions as bipolar feedback processes that create diversification, novelty, and complexity within the context of linear growth and subsequent decay. Each bifurcation generates new oppositions. Development is a tree, not a linear sequence. Each differentiation of opposites is a forking in a cascade of bifurcations. Each distinction provides a two-dimensional framework for making decisions that evolves throughout life. Development is heuristic: multiple paths are possible, as differentiations are compounded, thereby generating multiple dimensions of complexity (one per opposition). Predetermined developmental stages are constantly modified by personal creativity and co-determined by social and personal interactions. Development is driven by the continuing interaction of opposites, both personal and interpersonal. The contradiction of internal, psychological opposites is never resolved. Each dichotomy has a positive and a negative side; healthy functioning involves the adequate assignment of one or the other, or a mixture of both, to each situation. Consider, for instance, trust and distrust. Rational behavior requires a proper mixture of both; persons who do not know when to distrust often suffer negative consequences, and as a result they become mildly paranoid. Teaching them how to distrust is thus therapeutic, and allows the therapist to go along with the person's feelings rather than struggle against his resistance. This illustrates the practical significance of the difference between co-creation and Erikson's dialectic model. The concept of co-creation offers an even more drastic departure regarding ageing. Instead of the dichotomy of integrity versus despair, which hinges primarily on past life events, co-creation involves continually growing up as we grow old (enantiodromia).

16.4 Age and Generation¹⁴

Congruent with the notion of action and process, life is a series of deeds, not just a series of changes determined by external circumstances. Health is not a state. Health is a process in which actions have consequences. Health is constructed to a significant extent by our actions. Exercise develops muscles and neurons; inactivity atrophies them. Nor is age a state, but a process of continuous growth and decay beginning prior to birth and continuing throughout life. Children and youngsters must be given freedom and responsibility to develop. Aging involves greater order and rigidity, both physically and mentally (Fig. 16.2), indicating the need for change to maintain function. Emotions, behavior, and intellectual activity markedly influence cardiovascular function, immunological responses, and the growth of synapses in the central nervous system. In turn, social norms and culture set up beliefs, emotions, behavior, and intellectual activity. Cultural attitude influences health by modifying behavior. Expectations influence health behavior. Expecting a short life span reduces self-care. Expecting a decrease in our abilities to be physically and mentally active, to learn and to create, is a self-fulfilling prophecy. Future-oriented thinking traces a plan for personal and clinical care. A process approach points to the process of growing up and growing old as fundamental in social and personal life. A healthy concept of age is a medical, psychotherapeutic and social goal.

The relation between generations can best be understood as a bipolar, mutual, and hierarchical feedback. In all societies, adults have supremacy. Yet equally fundamental is the power of the children in the family. Parents provide and serve the children; as adults, they are dominated both physically and socially by their offspring (priority of youth). The hierarchical relations between generations, just as hierarchical relations in mathematical lattices, are dual, or bi-directional. They are also bipolar, not solely positive. Child abuse is prevalent and infant mortality is high. In the same manner, elders are sometimes abused and often excluded, neglected and discriminated against. For this

¹⁴ Sabelli, H. and Sugerman, A. (2003). Life-Long Creation in the Prevention of Premature Aging. *Kybernetes* 32: 778-787; Sabelli, H., Patel, M., Carlson-Sabelli, L., Konecki, J., Nagib, J., and Sugerman, A. (2003). Aging and Social Systems. *Kybernetes* 32: 767-777.

reason, they must assert their rights. The rights of elders may become the next focus in human liberation,¹⁵ as a complement to efforts for the liberation of children, youngsters, and women. Creation theory also has concrete applications for clinical interventions.¹⁶ But first and foremost is desire. Desire is as essential as knowledge in living and creating. Ageing, pessimism, cynicism, are lack of desire.

The “cultural conserve” plays an essential role in creativity (Chapter 17). Elders have a significant social role to play: Remember and tell. Part of the discrimination against elders is dismissing the ideas of their generation as obsolete. Recognize enantiodromia, the newer is both better and worse than the past: it is vital to convey what was good to counteract what is worse.¹⁷ This is not to deny the existence of decay, which occurs in each individual and also, most important, in each tradition. Every movement and every **ideology decays as it is transferred from one generation to another**. Christianity, from the Apostles to the Inquisition, clearly illustrates it. For this reason, adherence to tradition often has negative social effects, and there is great

¹⁵ Neglected in the past, ageism may become a focus for 21st century emancipatory movements in the wealthier countries. As older adults represent a large, powerful and growing constituency, success could be achieved in relatively short time. The success of one such movement paves the way for further social progress.

¹⁶ Allow me to illustrate the practical significance of the bios model with psychoeducational strategies for elders. In applying the concepts of creativity to daily life, aspects of creation can be paired with suggestions to improve quality of life. Diversification suggests variation in how one goes about one's day, rather than becoming mired in routine. The notion of episodic patterning encourages alternating different activities, thereby reducing wear and increasing range of capabilities. Novelty clearly suggests doing new things. We recommend elders try something new every week. Structure and order provide inspiration for actively organizing one's days, rather than letting them go by. Novel organization and structured order are opposite, complementary ways to maintain complexity and to overcome decay. Healthy aging involves continuing physical, social and intellectual activity throughout life –action. Changing cultural perceptions regarding aging is only a first step in this direction. Dynamic monism has further implications for health, as it suggests demanding comprehensive medical care. Biological priority and psychological supremacy advocate attending first to one's personal health and keeping life meaningful. Opposition implies interactions with older and younger persons. Conservation plays both personal and social roles. Transforming isolated memories of apparently separate episodes into an integrated story provides meaning. Telling memories serves to create the story. Elders may be further encouraged to record their memories for future family generations. Talking with others of the same generation may help us see the social context in which we operate. Telling our story to the young connects generations. Elders can foster progress by transmitting to the young their ideals and experiences.

¹⁷ Specifically, the ideals of the 1960s generation that promoted civil rights, women's liberation and sexual freedom, and opposed racism, war and colonialism, are worth transmitting to younger generations dominated by market interests, terror and war.