

A PLURICONSTRUCTIVIST REFORMULATION OF PIAGET'S MODEL OF  
COOPERATIVE EQUILIBRIUM WITH AN APPLICATION  
TO SYSTEMIC FAMILY THERAPY.

G. Cellérier, O. Réal del Sarte

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1 THE SUBJECT IS AN EVOLVING CONSTRUCT, THE RESULTANT OF THE INTERACTIONS OF THREE EQUILIBRATION SYSTEMS.

This application is being developed within a version of Piaget's constructivism that has been previously generalized to include what he called the "hereditary and sociological factors" of development (and that he could consider to be relatively invariant factors of psychogenesis at its timescale) as active equilibration systems. We have called this theoretical shift "pluriconstructivism" to indicate that all the subject's psychological functions are the evolutionary resultant of the simultaneous composition of the continual, both direct and reciprocal actions of three evolutionary systems:

- Darwinian phylogenesis, a species specific equilibration system.
- Cultural sociogenesis.
- Individual psychogenesis.

These three equilibration systems operate on vastly different timescales: the quasi-geological inter-biological generations one of hominization for phylogenesis, the ethnological one of both intra- and inter- (cultural) generation for sociogenesis, and the developmental inter-stage and intra-individual one for psychogenesis. This has an immediate general consequence: within the pluriconstructivist framework all the givens (data) or facts (facta) of constructivism become evolved fieri, that is to say, they are phenomena whose genesis in our species must be accounted for as consequences of this constant equilibrative interaction on the diachronic dimension during our evolutionary history, and whose particularities deriving from their origin need to be taken into account on the synchronic dimension of any therapeutic application. Thus the questions of the epistemological status and of the evolutionary origin of the "qualitative values in static ("synchronic") sociology" employed by Piaget ("Essay on the theory of qualitative values in synchronic (static) sociology." *Études sociologiques*. 1965 English. London New York Routledge 1995 edited by Leslie Smith, translation Terrence Brown. ISBN 15107806 (hb) can be browsed in: Google Books.) to define the "equilibrium conditions of exchange" needed to be examined, concurrently with those of these schematisms

and of their forms of equilibrium specific to our species. Within the latter, hominization no doubt took place in a species that had already become social in the ethological sense (technically defined by the fact that genetic kin contribute to the rearing of the next generation), but the differentiation of the psychogenetic acquisition of handicraft specializations and of their sociogenetic cultural intra- and inter-generation transmission decisively inflected the nature of its evolving sociality. This form of proto professional specialization (that is independent of the ethological specializations linked to sex or age) tends to deprive hunter-gatherers of their economic independence, their individual autarchy within the initially free self-service of the ecological niche. To acquire total set of goods or skills they need for their survival, specialists thus need to start exchanging produce or labour with multiple other complementary specialists, and to evolve the relevant exchange skills. The consequent differentiation of exchange values and exchange schematisms then further modulated the hominization process, from *Homo habilis* through *Homo faber* to *Homo sapiens*, together with their correlative sociogenetic acculturation. Moreover, by progressively converting the specialists' basic biological necessity of physical survival into the socio-economical obligation of earning their living to provide for their biological vital needs (thus instituting economic "survival"), the emerging division of labour with its consequent confrontation of offer and demand, between both consumer specialists (for lower exchange offers) and producer specialists (for greater productivity), paved the way the for possibly ultimately fatal evolution towards their reduction to the *homo socio-œconomicus* status of consumerism in our market societies, that is presently subject, to put the finishing touches to the reduction process, to a globalization of free unregulated competition that offers majorative advantages to the generalization unfair practices. This evolution has effectively inverted the initial subordination of the specialization strategy and its exchange sub-strategy with its automatic majoration of economic productivity, as an instrument (a self optimizing servomechanism) of the greater welfare of the group human exchangers practicing it, into their subordination as individual instruments (factors of production and consumers thereof) of the increase of production. It offers a fascinating sorcerer's apprentice-like example of a sub-equilibration system of sociogenesis, that of economic majoration, seizing power and subverting the value government of the evolution of its previous masters. It's consequent subordination not only of human material well-being but even of basic human dignity, to the majoration of the flow of matter and energy through the production apparatus can be seen as the root of many present evils such as the constant increase of the gap between the rich and the poor (this both within and between societies) together with that of the quantity of waste products and thus of pollution both material and thermal, etc.

The specialization strategy thus has two opposite consequences on the evolutionary dimension. On the one hand the meeting of interests of the specialists as mutual consumers offers majorative advantages to their differentiation of individual negotiation schematisms (those of Piaget's equilibrium of exchanges), and to that of social schematisms (those of the decentralized precursors of juridical orders) for the regulation of conflicts of interests and the enforcement of the equilibrium conditions: Piaget's "obliged conservation" of values, both of which are steps on the road leading to the future operatory equilibria of co-operative exchanges. On the other hand this same meeting of the interests of the specialists, but in their role of producers generates competition for the same consumers between them (thus closing the regulatory interaction of offer and demand), and this offers majorative advantages to their differentiation of defection and power struggle schematisms leading to unfair competition in the general sense of solving conflicts of interest by the use of force or of deceit. Both of these constitute the idiosyncratic "crimes against society", in the sense that by destroying relations based on good faith and mutual free consent, and thus destroying the profitability of exchanges, they open a majorative advantage for exchangers to revert to the prior autarchic mode of interaction.

We consequently extend the analysis of the conditions of exchange equilibrium to these agonistic and antagonistic competition schematisms that arise as the dual inevitable evolutionary consequence of the specialization strategy, and whose equilibria functionally complement those of cooperation schematisms. These conditions are, briefly, those of the normative regulatory ritualization of the "balances" of power, that are in effect the pecking orders of terror, that inevitably result from the confrontations of agonistic exchange schematisms founded on the principle of (my) might is (my) right, might being the use of any of physical, psychological, social or economic dominance. The unregulated prevalence of such exchanges leads to the runaway escalations of the positive feedbacks of the symmetrical exchanges of retaliation (in which the original pseudo equity of "an eye for an eye" quickly amplifies to the hundredfold return of evil for evil) that lead to "hereditary" vendettas. These ensure the return to pre-Leviathan stages of sociality in which, to quote Hobbe's words, there are: "No arts; no letters; no society; and which is worst of all, continual fear and danger of violent death; and the life of man, solitary, poor, nasty, brutish, and short." The abuses of economic power in the globalization of a "free competition" freed of any effective economic Leviathan extend Hobbe's foresight today to sociogenetic regressions that are not exclusively based on the use of brute physical or military force.

## **1.1** EPISTEMOLOGICAL CONSEQUENCES OF PLURICONSTRUCTIVISM.

An immediate epistemological consequence of pluriconstructivism is the dissolution, of the nature nurture dichotomy. In Lumsden and Wilson's words: "empiricism is not an evolutionary stable strategy". Not only is psychogenetic acquisition species specific, but within any species the genetic assimilation of acquired conducts with reproductive value is the rule. Piaget's epistemological tertium quid situated between preformism and empiricism is thus given a phylogenetic basis, with the crucial difference however, that this assimilation is not a direct transmission of acquired characters to the next generation, but that it is a reconstruction by genetic variation to subject in our species to their "thousand year rule". This rule of thumb is an estimate of the time it takes (the number of generations) necessary in our species to genetically facilitate an acquisition. One extreme of this facilitation (described by Minsky as (genetically) "predestined learning") is the full genetic specification of a conduct, in which except for its parameter tuning, no acquisition mechanism is necessary. This extreme is that of classical preformism: the scheme and its specific content constitute an instinct, and are what could be better described as genetically (fully) preinformed. We may note here that the tertium was in fact already invisibly present in this extreme of the nature nurture dichotomy: even Chomsky's heart has to learn to beat, in that it has, for instance, to adjust the temporal and quantitative parameters of its cycle to its own size and to that of the body in which it beating. Empiricism occupies the opposite theoretical epistemological extreme in which only the associative acquisition mechanism and its conservation medium, the mnemonic blank slate, are fully preinformed. We can also note here that even the purest empirical learning necessarily has a genetic basis: no neurons and neural nets can implement such an associative learning machine without genes to specify their processual structure, parameters, connectivity, selective reinforcement rules, etc. Predestined or prepared learning generates the extension of the epistemological tertium by filling the interval between empiricism and preformism with continuum of increasing degrees of preinformation, of which the full variety is available for psychogenesis, according to the schematism to be acquired, thus dissolving the nature nurture dichotomy.

The most general epistemological consequence of pluriconstructivism results from its introduction of "the cybernetic" (in contrast with the original cybernetics as a technical discipline) as the epistemological category of our apprehension of teleonomic or value governed systems. This unifies the objects of the natural (life) sciences, the various species' organisms and genetic systems, with the objects of the "sciences of the artificial", the various artefacts the former construct. This both founds in a principled manner, and extends (to the entire biological universe) Wiener's (Wiener N.1948, *Cybernetics: Or Control and Communication in the Animal and the Machine*. Cambridge, MA: MIT Press) original

conceptual unification of organic and artificial machines. In the pluriconstructivist approach this unification is based on the identification of Darwinian genetic systems as a generalization of the early “self-optimizing servomechanisms” that, for instance, optimized the economic productivity of petrol cracking plants by hill-climbing to a local maximum on a mobile evaluation surface constantly re-defined by the evolution of the prices of the different oil fractions on the market. These servomechanisms were misnamed as self-or auto-optimizers, they were rather automatic optimizers because they did not also hill-climb to optimize their own hill-climbing method, whereas as Darlington early showed (Darlington, C. D. 1939. *The Evolution of Genetic Systems*. Oxford University Press.) the genetic system as the hill-climbing mechanism of evolutionary variation and selection for (re)productivity is itself subject to Darwinian evolution. This reflexive majoration of the majoration scheme itself is the defining property of Piaget’s majorative equilibration, and precisely the self-modifying condition that distinguishes it from ordinary automatic optimizers. The genetic systems of Darwinian evolution can thus simultaneously be seen as the primal equilibration systems, and as such as the first cybernetic auto-majorative servomechanisms, and finally moreover as the origin of the psychogenetic and sociogenetic ones. This allows the origin of life as we know it (in which all organisms are the expressions of a genetic system), to be defined as coextensive with the origin of genetic systems. Within an equilibration system any parameter (such as productivity, economic or psychogenetic, or reproductivity, etc.) that its evaluation function can use to govern its majoration can thus receive a positive definition as a value scale, and the function of any mechanical or organic structure (organ) or process (functioning) can in turn be defined by its contribution to this majoration. This extends to the psychogenetic definition of values, goals, and means-end relations. These teleonomic notions constitute the fundamental theoretical entities of the cybernetic category, with the reverse engineering of functional analysis or decomposition, and the direct engineering of functional synthesis or composition as its basic methods, whose application reveal two general principles, that of the multirealizability of values and functions, and of the reciprocal plurifunctionality of structures. At the psychogenetic inter-individual level, a given self-assertive value, for instance, may be realized at many different stages, by the achievement of many different goal situations (the obtaining of an indefinite variety of behaviours from others for instance) each of which may be attained by many different means fair or foul (honest or deceitful negotiation and exchange, theft, or the outright use of blackmail, intimidation or force of which there are a variety as indefinite as human bargaining, seduction or Machiavellian and martial inventiveness). Conversely, once acquired the same negotiation scheme for instance can be applied to the achievement of an indefinite variety of goal situations, each of which may satisfy a multiplicity of different qualitative values (that become quantitative when by

becoming subject to market offer and demand they are given monetary measures). Taken together multirealizability and plurifunctionality thus have the effect of dissolving any possibility of attributing a unique goal a unique evaluation to any action, and conversely a unique realization to a value. This lack of bi-univocity together with the fact that unlike atoms and other physical entities with fixed properties, the permanent objects of the soft sciences are evolutionary ones with changing realization structures and properties, is the main reason why “deterministic” explanation and more fatally for “hard nosed experimental scientists”, prediction, in the soft behavioural sciences are systematically harder than in the hard sciences. De Saussure’s “arbitrariness of the sign”, for instance, can be seen to be two-way: a given sign can be defined to designate any signified, and the converse is also true, but this extends to schemes: any scheme can be used in the pursuit of any goal, and conversely. This means that one cannot deduce from the nature of a scheme what value it satisfies, nor from that of a value what scheme or set of schemes realize it. This two-way indetermination is characteristic of the soft sciences, whereas in the hard sciences two-way univocality is more generally striven for and attainable: an atom’s structure together with its mass and atomic numbers for instance determines its exact position in the periodic table, and conversely.

## **1.2 PSYCHOLOGICAL CONSEQUENCES OF PLURICONSTRUCTIVISM.**

Concurrently pluriconstructivism has a number of psychological consequences. The central one is that, if the epistemic subject of constructivism is characterized by the logico-mathematical structures formed by its schemes, within the pluriconstructivist perspective the latter become part of the instruments of the psychological subject’s continual equilibration cycle. This operating cycle, which ensures the continuous value government or automatic piloting of the subject’s conduct, is thus identified with the subject’s basic functional architecture. It follows that from being what Piaget described as “the central problem of development”, equilibration in its psychocybernetic reformulation thus becomes the central solution both of the subject’ synchronic adaptive “re-equilibrative” functioning and diachronic majorative evolution. When activated to control the equilibration cycle in its interaction with a given activity universe schemes have the function of a specialized autopilot that guides the subject’s accomplishment of the routine tasks that constitute the extension of the schemes equilibrium domain. When the subject’s activity exceeds the limits of this field, the majorative component of equilibration enters accommodation’s recursive trial and error assimilation cycle to existing schemes, guided by the activity universe’s specialized evaluation functions. The synchronic and diachronic modes of equilibration are thus functionally complementary. The latter provides new equilibrium values to the former, which activates it in return when it fails to re-establish them. This finally has a consequence on the status of schemes as theoretical entities of pluriconstructivism: they acquire a functional psychocybernetic

definition, that of acquired servomechanisms preadapted (preaccommodated) to specific domains. This definition makes of schemes functional invariants that are independent of their successive psychogenetic processual realizations.

The main general psychological consequence of pluriconstructivism that we shall evoke here is its identification of the affective phenomenology of needs and motivation with the retroactive or reafferent and proactive or efferent components of the cycle of the subject's value (self)government. To translate Piaget ("Les relations entre l'intelligence et l'affectivité dans le développement de l'enfant." Sorbonne lectures, 1953-1954. A digitalized version of this text can be found on [www.fondationjeanpiaget.ch](http://www.fondationjeanpiaget.ch)): "All conduct is an adaptation, and all adaptation is the reestablishment of the equilibrium between the organism and its environment. We only act when we are momentarily in a state of disequilibrium. Claparède has shown that this state is expressed by a sui generis affective impression: the consciousness of a need. The action ends when the need is satisfied: the return to the equilibrium state is then marked by a feeling of satisfaction. This schema is quite general: there is no feeding without an alimentary lack; not work without a need; no act of intelligence without a question, that is to say without the feeling of something wanting, hence without an imbalance, hence without a need." From the perspective of psychocybernetic equilibration Piaget is already describing the subjective evaluative and motivational experience and the external activity that result from the value government of the subject's activity during the operation of the equilibration cycle. As a transition towards further analysis of the nature of this cycle we may note that even the lowly thermostat only acts if it detects a difference between its target value, its Sollwert, and the present situation. This is true of all cybernetic systems: they impose their values on their environment by enclosing it within a loop whose continual detector-evaluator-effector cycle controls their activity environment. (This basic operating cycle is somewhat like the recurrent read-evaluate-print cycle of such artificial organisms as automatic rewriting systems on their arguments.) The detector-evaluator half of this loop is its afferent (and thus reafferent with each cycle) evaluative part. It detects and evaluates the differences between what is, the value of presently detected situation, and what should be, the normal, optimal, etc., value. In human beings this evaluative difference is subjectively experienced as the "sui generis affective, impression", consciousness, sensation, feeling of need, want, deficiency, etc. On the other evaluative-efferent half of the cycle, an action scheme is selected whose effect is associated with reducing the difference. When this is totally accomplished, this event gives rise to what is subjectively experienced as "a feeling of satisfaction" and of success of the action, which deactivate the action scheme. This constitutes the efferent or motivational part of affect: the institution of a scheme as an agendum -- a scheme to be executed -- is subjectively experienced as a disposition, a tendency (the German

Trieb writes Piaget), an urge, an impulse, a pulsion or even in some cases, a compulsion to act. Equilibration thus subdivides affectivity in general into two main components: the feed-forward tendencies that motivate us to effective action, and the evaluative feed-backs that affect us in return.

As can be made apparent in Piaget's description, the values whose re-establishment or whose majoration determine needs and tendencies are qualitatively diverse and they also belong to different sub-equilibration systems.

Feeding (and predation) together with the other psycho-ethological schemes or instincts that serve and preserve the homeostatic values of the various needs of self-preservation and reproduction, form what we have called instinctual equilibration. Both the setting of its target values and their majoration are exclusively phylogenetic, they act as immutable givens of the human condition or nature on the timescale of psychogenesis.

As for the multiple specializations of work, as opposed to fun, they satisfy economic needs and values, and with the other practical know-how skills that fulfil the qualitative values of leisure activities it forms the extension of what we named praxic equilibration to indicate its function in the acquisition and operation of the schemes of practical, social or intellectual activities. These schemes integrate the social psychoethological ones pertaining to the different ages of life into a more general system of acquired automatic reactions, customs and rituals that constitute the daily, weekly, etc. agendas, time tables, schedules of school children and adults. The basic ethological cycle thus recursively sub differentiates into the daily sleep-commute-work-commute-sleep... with its embedded feeding, grooming, recreation, etc., sub-cycles of lower temporal scales, each of which has its own recurrent routines down to the level of the real time equilibration cycle, to form the subject's "second nature".

Finally the posing and answering of questions satisfies or majors cognitive truth values and needs. These qualitative alethic values of Truth, together with the traditional aesthetic and ethic ones of Beauty and Justice and other ideal values, constitute the evaluation functions of what we have named reflexive equilibration.

To maintain the subject's psychological and psychogenetic integrity, which constitute the highest level of equilibration, that of the whole subject, at whose basic level lies physical integrity, every one of the values belonging to the (recursive) hierarchy of value scales that form the subject's sui generis value system and personality need to be equilibrated at its proper time. However since subjects can only dispose of one physical organism as an execution machine for their schemes to accomplish this task, the different values must time-share its government. At the level of instinctual equilibration, motivational systems solve this control problem by what amounts to entering the motivational centres for "the four Fs' of biology", i.e. the centres for the fundamental psychoethological value sub-systems that govern



feeding, fighting, fleeing and reproduction in a continual tournament for the control of the organism, the winner of which is the centre with the highest difference to reduce weighed by its level in the hierarchy of value. Ties such as between fight and flight seem to be resolved by displacement activities (such as grooming for example) that transfer control to another centre. The structure of the tournament (the connectivity of the mutual inhibitions between the centres) and the hierarchical level (the relative weights) of the contestants are differentiated by phylogenetic equilibration, while praxic equilibration may well differentiate homologous automatic habitual motivational systems. The control problem propagates upwards to the top level, that of the coordination of three equilibration systems. Displacement is still possible at this level, but it does not assure equilibrium, because according to circumstances, each of the systems must be able to recruit its neighbours to serve its own ends. We thus need to be able to ignore hunger for instance while accomplishing a more “high-minded” task -- or even to exploit it to intensify our effort -- and conversely, to subordinate our praxic and reflexive skills in various forms of division of labour to the satisfaction of the “baser” needs and instincts. The relation between the spirit and the flesh is thus not a spiritualistic fixed hierarchy where the former reigns over the latter, but a mobile one, in which each of the constituents is able at need to subordinate its peers. The relation is thus a heterarchical one, in which some form of hierarchy always exists with a top position, but its occupant changes according to circumstances. The habitual automatic conditions of this control transfer may be differentiated by praxic equilibration in the same manner as those of the lower level.

Praxic equilibration shares the same basic limitation as phylogenetic equilibration: both are blind modes of trial and error, or radically short-sighted ones, in the sense that since their selection of the eventual majoring trial happens after the event, they are not capable looking farther than one step forward, because they adopt the result of the first step that majors the present situation's value. It follows that they cannot anticipate and avoid the possible lower summits, or mesas, or even dead ends into which pursuing the present course may lead in the long term. Since backtracking means retracing the last majorative step, and consequently selecting a reverse step that minorates or pejorates the situation which is an operation that the selection rule does not allow, this form of equilibration is irreversible, once it has reached an evolutionary dead end it cannot back out of it. This is the basic reason why second nature may turn out to be worse than original human nature, because all habits differentiated in this blind way may alleviate the symptom rather than the cause of the perturbation. Worse even if by chance they respond to its synchronic cause, on the diachronic dimension they inevitable candidates for the future status of “bad habits” in the subject's psychogenetic evolution, when the scheme configuration and the situations in which they persist to act have changed. Moreover, as both the activation and the execution of

psychoethological and praxic schemes are or become automatic, subjects are most often unconsciously and involuntarily, if not compulsively, governed not to say servoed by their “innate and acquired” autopilots, thus reversing the master-servant subordinate, or the master-servo-mechanism relation.

The tripartite functional architecture of psychogenetic equilibration is related to what McLean (1990) expressed in anatomical terms in his triune, reptilian, vertebrate and homininan brain, with the fundamental difference that being functional, unlike Mclean’s triunity, this architecture is not bound to a tripartite neuroanatomical realization, and does not require one. Indeed, the reflexive component, for instance, is based on initial instinctual ones for the acquisition of praxic and reflexive ones, and conversely instinctual and praxic components may thus acquire reflexive ones.

### **1.2.1** THE PROACTIVE AND RETROACTIVE MODES OF REFLEXIVE EQUILIBRATION.

These very shortcomings of praxic equilibration offered a durable selective advantage for the phylogenetic differentiation of a reflexive equilibration ultimately allowing human subjects to construct explicit presentative schemes representing not only “what their schemes make them do” but what they concurrently make them perceive, apprehend, feel and tend to do, and to imagine their compositions according to the two functionally complementary proactive anticipatory and retroactive reconstitutive modes. The first is the mode that allows for the new form of reflexive equilibrative hill-climbing, a novel form of trial and error whose elementary steps are pre-directed by acquired knowledge. On the practical side of the application of knowledge this extends the anticipatory span of equilibration side to planning as many steps ahead, initially, as the subject is capable of mental composition. On the reflexive side of the acquisition of knowledge, this ultimately leads to hypothetico-deductive and operatory thought. Both together enter a mutual positive feedback loop in which the application of knowledge serves its further acquisition, and conversely, which realizes what Piaget describes as the “expansion of activity”: “...Elementary value is linked to the expansion of the subject’s own activity. The child seeks to assimilate the totality of its external environment, and assimilation then manifests itself under two correlative aspects, the cognitive one of understanding and the affective one of value and interest. But overcoming the obstacles to assimilation demands a special effort, and victory over difficulties acquires a special value for the expansion of activity.” (Piaget, id.) The indefinitely expansionist character of equilibration that leads on one side to the specie’s expansion of its domination of the planetary environment by the metastasic swarming of its artificial urban termitariums, and on the other to the limitless acquisition of scientific knowledge is a consequence of what we have named the inherently and necessarily autoist character of any equilibration system, to which we return below. As to the special evaluation function that governs the victorious

expansion of the subject's activity it gives rise to what Csikszentmihalyi describes as the autotelic feeling of flow. (Csikszentmihalyi, Mihaly (1975). *Beyond Boredom and Anxiety: Experiencing Flow in Work and Play*, San Francisco: Jossey-Bass. ISBN 0-87589-261-2) This feeling of inspired performance evaluates the attainment of a local optimum of the application acquisition curve in which subjects apply the maximum of their acquisitions to improvise a maximum of innovations as candidates for acquisition. This corresponds to the vection of the majoration of knowledge characterized by Piaget (*Introduction à l'épistémologie génétique: Vol. I: La pensée biologique, la pensée psychologique et la pensée sociologique*. Paris. PUF. (1950).) as consisting in the acquisition of the maximum of novelty compatible with the maximum of the acquired, with in return the latter's renovation.

To return to autoism: any equilibration system is necessarily self-expanding or selfish in the strictly Darwinian technical and quasi-tautological sense introduced by (Dawkins, Richard. *The Selfish Gene*. Oxford: Oxford University Press. 1976. ISBN 0-19-286092-5) that a gene cannot give up its own reproduction in favour of another one and still remain a gene, i.e. the bearer of genetically transmitted command, since it vanishes from the next generation of the specie's evolution. Genetic altruism in this technical sense is thus suicidal, the altruistic gene self-destructs as a permanent evolutionary object. From the perspective of pluriconstructivism, the selfishness of the gene derives from the reproductive selfishness of the genetic system to which it belongs. As an equilibration system, it preserves and majors by definition its reproductivity (which can be none other than its own). Again any genetic system that is unselfish in the technical sense that it reduces or nullifies its reproductivity vanishes from evolution. The term selfishness, however, as a property of a self, or of an ego for its companion egoism, has so many anthropomorphic connotations that are entirely foreign to this restricted technical sense that it has possibly generated as many misapprehensions as socio-biology itself. Previously Piaget's term of infantile egoism suffered much the same fate, though had explicitly stated that the infant was "a Narcissus without Narcissus". We have thus avoided this terminology by defining autoism instead, on the model of egoism, as the definitional property of equilibration of preserving and majoring the values of the value system that governs it (which thus cannot be other than its own). Genetic systems are thus autoistic, and to be durable so need to be the (sub)equilibration systems they have generated. Thus sociogenetic equilibration is autoistic and cultures are somewhat like immune systems: either they indifferently reject locally differentiated and imported cultural schemes that are presently too foreign for assimilation to the society's sociogenetic pool, or they are absorbed and vanish from sociogenetic evolution. They are thus less xenophobic than autophilic, and this is a consequence of their equilibrative autoism, whose majoration further makes them colonialist, imperialistic, etc. when it extends to other cultures. As for psychogenetic

equilibration its instinctual component inherits its autoism from phylogenetic equilibration: organisms are preinformed to realize their self-preservation values as a subsystem of their reproductive values. Organisms that survive longer have a longer reproductive period and thus a higher reproductivity. However the conquering expansionism, both material and cognitive of praxic and reflexive equilibration is one of the facts of psychogenesis that must be accounted for in the pluriconstructivist framework. From this perspective psychogenetic equilibration is a servomechanism to which the specie's genetic system delegated the real time intra individual production and the differential conservation of these functional equivalents of instincts that schemes become as autopilots. Delegating one's own task to a subordinate is a risky business however, because to fully accomplish its assignment the psychogenetic delegate must have the same self-modifying power as its delegator, the latter cannot pre-constrain it to the equilibration of specific values and goals. As a consequence it is free to setup values and goals that are contrary to those of its delegator. Contraception and medicine are obvious examples of active psychogenetic insubordination placing self preservation above reproductivity, but the choice of majorative dolce farniente is the complementary example of passive insubordination placing resource conservation above the expenditure of fulfilling its delegated function. The active form of insubordination is the price to pay for full delegation; however its passive form is moderated by expansionism. The present local maximum of majoration that gives rise to the autotelic feeling of flow is both a positive reinforcement for present majorative activity, and for its continuation. It is situated at the top of an acquisition curve that leads from boredom to anxiety through inspired improvisation. On the one side of the curve subjects have full mastery of their activity universe and in which they execute automatic routine tasks. This lack of majoration if it persists generates the sui generis evaluative feelings of monotony and boredom to which are attached the motivational tendency to seek a higher level of difficulty and corresponding majorative activity. On the other side of the curve subjects have no mastery of a task universe that is totally unpredictable, this generates an evaluative feeling of anxiety and incompetence, linked to a tendency to reduce difficulty to a level at which majoration becomes possible. These evaluative and motivational affect loops induce, promote and regulate majoration activity, by positive reinforcement of its acquisition optimum, and negative reinforcement of its idleness. By thus in effect setting up the majoration of its own productivity as the evaluation function of psychogenetic equilibration, phylogenesis induces the consequent expansionism of both know-how and knowledge. Genetic systems themselves are governed by a similar evaluation function, in that differential reproduction evaluates the majoration of their own reproductivity. It has allowed them to colonize most of the planet with their multiplicity of intermingled ecological niches. Its psychogenetic counterpart has had a similar expansionist effect, which is manifest in that

no existing ecological niche on the planet is immune today from human invasion and eventual destruction, and that the species may well extend its niches off planet. In the social universe, the consequences of individual autoist expansionism become apparent as soon as two or more autoistic entities interact within an exchange relation in which both seek to major their own values. The equilibration of conflicts of interests is thus both the basic problem to resolve in human relations, and when this does not happen spontaneously, in therapy.

The expansionism of the proactive anticipatory mode of reflexive equilibration thus contributes to the production of future problems, however, when it is allied with its complementary retroactive reconstitutive mode, they conjointly provide possible means for their solution. As we noted above, the fact that praxic and phylogenetic equilibrations are both automatic blind has the consequence that their immediate scheme majorations may induce pejorative side effects and long term consequences form new problems in themselves. The retrospective reconstitutive representation of what these schemes have made us do, feel, perceive, interpret, etc., offers the possibility or exercising the diagnostic mode of reflexive equilibration and of imagining possible alternative conducts to satisfy values that are not preserved or majored by the present habitual schemes, or that they even injure by actually pejorating them. However conscious apprehension, diagnosis, and perception or conception of majorative alternatives is not enough: consciousness must be made efficient. By proposing or altered or alternative schemes for execution, reflexive equilibration enters into a conflict for control with its heterarchic collaborators that the motivational system may not be able to solve automatically.

This is precise point where reflexive equilibration's value judgements (these are reflexive evaluations as opposed to the affective experienced ones detecting the qualitative nature and the intensity of a need) and its volitional operations must take over and actively intervene to resolve the conflict in a less immediate and automatic, but more reflective, considered, and deliberate manner. When conflicts for automatic control arise between a value that presently governs the subject's equilibration and any other one, reflexive equilibration's reflexive function is to situate the elements of the conflict at their proper rank within the total value system that constitutes the subject's personality, then its volitional operations' function is to make one thus judged to be superior prevail by an "operation of the will" over the other in their contest for control. The value judgements and the operations of the will are the affective operatory homologs of the cognitive comparison of two magnitudes determining their active re-ordering within a seriation.

### **1.3** CONSEQUENCES FOR THERAPY.

#### **1.3.1** COOPERATION AND FAIR COMPETITION AS THE EQUILIBRATION OF AUTOISMS.

We may now situate Piaget's notion of cooperative equilibrium within the pluriconstructivist framework. To illustrate this notion, Piaget analyzes the coordinations of two children's actions whose common goal is to build a bridge from opposite sides of a stream. He shows that to achieve this coordination (which is the co-subordination of their own actions as means to achieve this common goal), each of their spatial operations on the plane must be transformed into its reciprocal on the other side of the bank, for instance a translation of the starting point of the bridge to the right for one must be made to correspond to a translation to the left for the other, etc. while on the vertical dimension the coordinator is the identity transformation, etc. Thus cooperation in the particular technical sense of Piaget's operatory definition results from the setting up of an operatory correspondence or coordination (resulting from the proper application of the INRC group of intity, negation, reciprocal, and correlative transformations) to operation structures belonging to two different subjects. In this technical sense then, when two or more subjects cooperate they literally co-operate, that is they both apply common operations coordinated by the same operatory transformations.

When subjects are face to face as in this example, reciprocity is the main transformation that translates each one's spatial point of view or perspective into the other's. To define the equilibrium conditions of exchanges of qualitative values, Piaget generalises this transformation from the dimensions of physical space, to the axiological ones of value scales.

To illustrate this we analyze the correlative hypothetical situation in this social universe, that the coordination of prestation and corresponding counter-prestation between two children whose common goal is to obtain the other's toy. At an initial stage, the direct consummatory scheme of this goal is to simply appropriate the toy. This face to face conflict of autoisms may result in a cross tug of war (in which both children simultaneously tug at the other's toy and resist the other's reciprocal tug at their own) that is the exact physical expression of the opposing axiological orientations of their majorative autoisms. In other words each child seeks a unilateral qualitative enrichment and expansion of its equilibration field at the expense of the other's.

This physical tug of war is a form of conflict that belongs to the basic instinctual level of the power struggle between autoisms; the schemes it activates are those that produce what in ethology are called the agonistic behaviours (an agonist is a contender) that equilibrate the biological self preservation and reproductory values at this level. This type of conflict is thus resolved by what is commonly described as the imposition of the "law of the stronger" according to the principle of "might is right" of "the law of the jungle", etc. The combat rules

of the game are ethologically ritualized as evolutionary stable strategies between co-specifics (with the consequence that competitors for a prey or a mate do not routinely exterminate each other, for instance). We have named “trial of strength” this form of conflict resolution. When the outcome of this conflict indefinitely repeats between contestants who cannot avoid each other (as is the case in cultures that enclose family members in the various forms of social isolation cells that form the carceral family) it may in its turn induce in the constantly defeated contestant a displacement to forms of conflict resolution with non-cospecifics, that are not ritualized, and in which absolute safety is only attained by the irreversible physical incapacitation or even destruction of what has become the enemy. The trial of strength thus escalates into a form of “fight to the death”, with the consequence that both contestants now feel threatened in their very physical (and consequently psychological) existence. In both cases we note that the initial stakes of the conflict of interests (the contested toys in our example) have been displaced to those of the victory or defeat, and survival or death ones of the respective duels. This has the effect that the values and interests are masked and effectively forgotten, to a point that the eventual victor may despise the spoils of victory that have now become worthless in this exclusive centration on the agonistic evaluation scale. At the praxic and reflexive levels the agonistic contests are reconstructed and socially re-ritualized in the rules of the game of competitive sports and games, economic competition, or in the case of families, of strategic power games, verbal duels, etc. these rules define fair play, fair economic competition, and fair dispute or good faith in argument. They define legally fair compulsory means, (fair economic competition, Queensbury type rules, etc.), and foul prohibited means (dumping, low blows, etc.). These social rules of the game institute the general use of buttoned foils in contests, which by preventing the focus of the competition to displace on the destruction of the enterprise, the challenger, etc. maintain it on the majoration of their relative productivity or competence. These rules of the game thus define the conditions of equilibrium in competitive exchanges by normatively compelling reciprocity. Reciprocity has the effect of changing the absolute pre-operatory form of immediate autoistic satisfaction at the expense of the other, into an operatory form of mutually relative autoism in which the satisfaction of the exchanger’s autoistic goals becomes the necessary means of obtaining the satisfaction of one’s own. In competition fairness is obtained by mutually renouncing foul play as a means to obtain the same from the contender. This push-down of the immediately consummatory unfair means in favour of the evaluative detour compelled by the fair one, or the predominance of the latter to satisfy the higher value of fair evaluations in competition, is the result of a value re-seriating operation of the will.

### **1.3.2** LEVELS OF INCREASING RECIPROCITY FROM AGONISTIC TO COOPERATIVE EXCHANGE.

This is also the central schematism underlying Piaget's model of the operatory equilibrium of exchanges, which we may now approach from the pluriconstructivist perspective. Marking the end of the sensori-motor stage, the precursors of such control operations by evaluative reseriation of precedence exactly coincide, with the inception of reflexive intelligence. Its representational modality allows the anticipatory combination of schemes according to means-end relations. This combinability is the consequence, and the functional use of the beginning inter-composability of schemes, that opens the way to their grouping into logico-mathematical structures. Anticipatory means-end composition indefinitely expands the look ahead span of equilibration, with the effect of making it reversible, because any kind of backing off or backing out scheme has the effect of increasing the distance from the goal, Characteristically at this point children become capable of spatial detour behaviours, such as backing out of an impasse, and more generally of what we shall call telic detours such as suspending a consummatory scheme of the goal that has reached an obstacle praxic equilibration cannot overcome, and turning over to reflexive equilibration the search for an appetitive scheme of the means that will enable its execution, then resuming the execution of the initial scheme. The telic detour is realized by a specialized control scheme coordinating the emerging operations of the will. We may note that it heterarchically moves hierarchical control of the subject's activity, from praxic equilibration to reflexive equilibration and back.

If we apply this novel possibility to our previous example of the tug of war, the detour scheme establishes a possible parting of the psychogenetic ways by displacing the agonistic to the cooperative mode of exchanges. It does this by allowing each of the antagonists to represent and anticipate that they may each offer to let go of their own toy to obtain the other's in exchange. If they then let go together, they will have accomplished the simplest form of exchange, the swap, which is based on an immediate reciprocal transfer of prestation and counterprestation values, with no institution of the virtual values of debt and credit. This effectively turns the antagonistic conflict of physical power of into a negotiable conflict of qualitative trade values, that can be resolved by the non physical confrontations of interests such as bartering, bargaining, haggling, etc., in which (with the exception of multinational corporations) each seeks to beat the price down, not the trading partner. For each child, the satisfaction of the autoistic values of the other, who now ceases to be an antagonist to become an exchange partner, becomes the necessary (in the telic sense) means of its own satisfaction. Both autoisms thus cease to be absolute to become transitive and relative because it becomes each exchanger's majorative interest to satisfy the partner's value majoration. The initial value scales that gave rise to the tug of war are thus reinstated for both, and some bargaining may



place to ensure that this reciprocal majoration or profit is attained. When this succeeds, the equilibrium conditions of the exchange are met, and it can take place. (If this fails it means the exchange has no interest for one or the other, or both and does not take place.) When transfers and countertransfers of actual values are not immediate, the values become the virtual normative ones of moral qualitative debts and credits, whose conservation of value will require later operatory reversibility. Immediate exchange is based on a practical morality, in that the exchangers only use the means that do not vitiate free mutual consent: deceit or the use of force are thus proscribed. This leads to a second reciprocal evaluation, prestations but of a moral nature, that of the prestators themselves according to the degree of value majoration they bring on the one hand, and to their qualities of good faith, fair play, etc. in the exchange. They can thus become preferred (or conversely shunned) partners. The winning Tit for Tat strategy in the iterated Prisoner's dilemma (Axelrod, Robert (1984), *The Evolution of Cooperation*, Basic Books, ISBN 0-465-02122-2.) differentiates defaulters from cooperators to treat them differently. In human exchangers this differentiation takes the more elaborate form of positive or negative affective evaluations regulated by the corresponding appetitive, evasive or aversive motivational tendencies, with the same function of positively reinforcing cooperators while negatively reinforcing defaulters. When exchanges extend to include the virtual values, the exchangers who reliably honour their commitments, who are good or bad debtors, etc. tend to become preferred partners. We should note here that a single exchange is only an interaction: it does not constitute an exchange relation. This only begins when the same subjects repeatedly exchange -- spontaneously, or as in families, under some form of formal contract institutionalizing the relation and specifying an allocation or distribution of tasks -- and their reciprocal evaluations as exchangers will determine whether they enter into such a relation, and within it how much credit they will extend until they claim their moral due or threaten to suspend, renegotiate or break off the relation, etc. The reciprocal moral evaluations of the exchangers are the basis of their mutual, appreciation, esteem, consideration, respect, etc. and give rise to relations of attachment, affection, etc. according to the type of qualitative values exchanged. The mutual enrichment of action that results from exchange "as a source of novel activities" (Piaget, 1953-1954) does not reduce to the strict practical reciprocity of the tit for tat of prestation and counter prestation, "it is an essential result of reciprocity in the attitudes far more than in the material actions as such".(id.) This reciprocity of attitudes reflects the sharing of a value sub-system governing the exchange itself (fair play, good faith, etc.), which has the effect that the exchangers are affected and evaluate their conduct in the exchange in a similar manner, which as Piaget points out is the definition of sympathy. In iterated exchanges the Tit for Tat strategy when it made to compete in a natural selection tourney with rival strategies, turns out to be more profitable on the long

run than the Defaulter strategy (which is as immediately profitable as theft or spoliation) because it creates more opportunities for profitable exchange with both cooperators and defaulters, while reducing the latter's exchange opportunities and thus their relative frequency. It thus has the effect of protecting cooperative exchange itself, and avoiding the return to autarchy. We may note that both forms of reciprocity have the same regulatory effect in the field of human exchanges.

Starting from our initial agonistic situation, cooperation initiates and progresses through a sequence of levels of increasing qualitative reciprocity: those of the practical reciprocity of immediate exchange, the operatory reciprocity of the conservation of debts and credits, and the moral reciprocity of mutual sympathy. This sequence culminates in what Piaget (1965) defines as the highest form of moral reciprocity, that of the "reciprocal substitution of the value scales, or of the reciprocal substitution of ends and means", in which the satisfaction or majoration of the partners' practical values ceases to be the means of their own satisfaction, to become an end and a value in itself, that of the "indefinite satisfaction of the neighbour" (in which the "neighbour" is the Christian one of "love thy neighbour as thyself"). Taken too literally this could mean the total subordination of one's own autoistic psychogenetic majoration, (a form of psychogenetic suicide or living psychic death) to, for instance, indefinitely providing drink to an alcoholic or satisfying the whims of a spoilt child (or adult), etc., thus realizing the reciprocally lethal injury of the participants' psychogenetic integrity. From the psychocybernetic perspective this definition of selfless love is thus too absolute, and needs to be amended to the relativized reciprocity of "the indefinite majoration of the partner". On the one hand this relativizes the unconditional indefinite value majoration to a reflexive evaluation of the nature of the partner's own (psychogenetic) good. On the other hand it also relativizes "Christian" selflessness, because the resulting reciprocal psychogenetic enrichment of the partners maintains and enhances their (autoistic) value and interest for and in each other. We may comment that the selfless Christian love of one's neighbour as oneself, when made reciprocal should not command the sacrifice of both autoistic psychogenetic majorations.

We may now situate the therapeutic process within this psychogenetic sequence of levels of qualitatively increasing cooperation.

In the psychocybernetic perspective of pluriconstructivism, the self diagnostic and depejorative modes of reflexive equilibration belong to its routine functions of monitoring and troubleshooting instinctual and praxic schemes' execution. From this perspective therapy can only attempt to help subjects to re-activate, reframe and monitor its re-exercise when it has become stalemated in a psychogenetic dead end. It must consequently be underlined that conscious representation and diagnosis of an injured scheme alone is not sufficient in itself, and neither is the voluntary substitution of an alternative scheme. For a scheme to learn, in

this context this means to re-accommodate, it must be effectively activated, and submitted to a deliberate majorative re-exercise in the course of which the therapist's own diagnostic and depejorative equilibration supplements in part, and sustains and activates the subject's own reequilibration process through the levels of reciprocity. Majoration thus does not emerge spontaneously from an isolated representative "conscious apprehension", nor from the complementary fiat of an isolated act of will: both modalities must be repeatedly activated within the relearning period of longitudinally repeated majorative exercise cycles. Therapy thus offers a sequence of possible ad hoc exercise situations that allows the subjects to trace their individual paths through the general sequence of increasing reciprocity.

This active intervention of reflexive equilibration has a quantitative and qualitative cost for the patients. While they are reexercising their praxic schemes, their performance and productivity is reduced, and they spend additional time and resources that are diverted from their other productive activities. Moreover, and this qualitative cost is more sensitive, backing out of a psychogenetic impasse entails the additional cost of an immediate affective pejoration of the alleviation it had attained. This perturbation of a scheme's previously attained equilibrium reactivates the very attempts at depejoration that gave rise to it, thus resistance to therapeutic intervention that threaten it, together with anxiety and defence come out in the psychocybernetic perspective, as intrinsic to innovative re-majoration.

### **1.3.3** THE HOMINIAN PRIMATIC TRUCE.

This remark leads us into the initial phases of therapy, in which the establishment with the therapist of a regulatory pact that sets up a common framework assuring security for the patients is essential, and is even more so when they enter it, as is often the case, locked in an agonistic relation of trial of strength which has led them to seek outside help. This means establishing a actively neutralised territory as a manner of stage set under the responsibility of the therapist as an uninvolved third party, in which conflictual and other schemes may be evoked and re-enacted in the form of therapeutic exercise whose stakes, those of allowing the participants the possibility of entering the reflexive equilibration mode of observing what their schemes make them do and feel, are thus explicitly disconnected from the "real" ones of the common family battlefield and their consequences there.

When patients arrive together for an initial session, their agonistic conflict has been put on hold at least long enough for them to cooperate in this task. This means they possess some means of calling for a suspension of hostilities (the equivalent of schoolchildren calling "pax" to temporarily withdraw from a game). Ethologists have observed ritualized signals in chimpanzees for instance, which trigger in contestants the establishment of what we (O. Real del Sarte, G. Cellérier, J. J. Ducret, in press 2010) have called a "primatic truce". This suspension of the conflict leaves it in the status quo ante, but enables the contestants to

displace their individual activity to the non agonistic and even eventual common accomplishment of the individual and shared agendas of tribal every day life. In our species couples often set up homologous praxic ritualized signals (such as specific changes of facial or expression or vocal intonation, or posture or gaze, tears, etc.) that serve to trigger in the partner the establishment of the hominian form of the primate truce. When evoking conflicts patients often reactivate both the conflict and its truce signal, and may then be made aware of its nature and its effect, and asked to be attentive to their manifestations in the real life between sessions. This reexercises the heterarchic transfer of control to the self observation and self diagnostic mode reflexive equilibration. Patients may then be asked to set up and deliberately use conventional non automatic pax signals such as the (highly ethological) appeasement signal of offering a candy from a special box. Such exercises have the effect of returning them a beginning reflexive mastery of their conflictual schemes, by inhibiting their automatic determinism through their own action they cease to be entirely acted by them.

Once this first form of active establishment of a truce is acquired (it may need to be actively re-exercised at any subsequent stage) although the truce returns the conflict to the status quo ante, it does not do the same for the participants since they have acquired some degree of control over its course. Moreover during this acquisition they have repeatedly exercised the deliberate activation of reflexive equilibration, this in a cooperative exchange where success was not individual victory or defeat as in the conflict, but the common achievement of its suspension. In this new framework, contestants who beg for peace does not feel the weaker as in the spontaneous conflict situation, but instead share a common victory over their acquired compulsion to the verbal or other tug of war. We may observe here that therapeutic interventions only re-exercise the subjects' existing schemes, and does this only indirectly by providing a different evaluation space to their representative equilibrations. The subsequent forms of this re-exercise build on the preceding levels of reciprocity attained, starting from this beginning level.

#### **1.3.4 FROM THE DEPEJORATIVE HOMINIAN TRUCE TO THE NEGOTIATED MAJORATIVE TRUCE**

As we noted earlier, the subjects' original stakes and interests are masked by the agonistic ones of victory or defeat when they enter this mode of exchange. In this mode remonstrations concerning the execution of prestations due within the implicit consensual division of labour of the family, for instance, are automatically perceived and evaluated by their recipients as the deliberate provocations of an antagonist who is attributed the status of a deliberate offender (an aggressor, a betrayer, an exploiter, etc.) to whom retribution must be brought. The exercises of the negotiated majorative truce aim to recentre the focus of the reflexive diagnosis back from the subjects' periphery, that of the agonistic cross-projections on the offenders and their behaviour, to the centre of the subjects, that of the expression of the

injuries felt by the offended. This requires instituting a higher level of reciprocity and trust because, instead of persisting in pretending blows do not hurt and one is invulnerable, confiding the pain they cause is to admit that one is vulnerable. Unmasking and confiding each other the nature of the injuries done and sustained in what we have thus called an exchange of cross-confidences is a necessary first step toward backing off from agonistic cross-retribution to enter the reciprocity of mutual reparation and future avoidance of injuries. The exercise we call the cross-monologue opens the way to that of cross-confidence. The patients are asked to each listen in silence to the other during a conjointly predetermined period (from five minutes initially to a quarter of an hour, they may preset a timer). They must not interrupt or answer the speaker, nor justify themselves, etc., and they are not to comment on the exercise afterwards, they may do so during the next session however. They must each express exclusively what they themselves usually feel during their agonistic exchanges. This includes, for instance, sentiments such as those of being ignored, despised, rejected, humiliated, manipulated, exploited, etc., by the partner, and emotions such as perplexity, impatience, irritation, anger, indignation, outrage, rancour, indifference, disgust, anxiety, fear, sideration, hurt and wound, sadness, despair, etc., that the former arouse in themselves. The listener is to attempt to understand and acknowledge the nature and existence of the partner's suffering and of its sources, without proposing or endeavouring at this point, either to assuage and remedy them, or to offer comfort or reparation.

The rules of the exercise constrain the evoked and re-experienced conflictual schemes in a ritualized frame that proscribes both recrimination and retort, thus protecting the participants from the risk of verbal and other escalations, and offering them the possibility of displacing their activity to the reflexive reconstruction of a vicarious experience of the partner's perspective. This deliberately re-exercises precisely the reflexive construction we spontaneously do when we attempt to put ourselves in someone's place to anticipate the latter's reaction to our envisaged action, paving the way to doing this within the exchange with the partner. The exercise has the more immediate consequence that when the partners comment the contents of their cross-monologues during the session, each has the confirmation that he or she has been effectively listened to. This is a central component of the move from agonistic verbal fencing, where the goal is to deliver the most crushing retort, to the reflexive reciprocity of effective dialogue and discussion in which the goal is to understand. This understanding of the other's plight is the reflexive conceptual and volitional part of empathy: the reconstruction of the other's evaluative scale and its active application to the situation. Empathy necessarily includes a hypothetico-deductive conceptual component since we cannot observe our neighbours' states of mind and affect. Concurrently during their narrative the speakers explicitly describe and often even re-experience the affects that are painful to them during the conflict, and that are

masked by the agonistic ones of the battle or ignored in their favour. This constitutes a reflexive basis for the reciprocal abstention from inflicting pain, the converse of “do as you would be done to”. When both have recognized and admitted their own and the partner’s not only together but also during sessions, the therapist may use this reciprocity of infliction of pain to make them aware of the vicious circle, or what a patient named the “paining loop”, in which he observes their conflicts to engage them. This reframing of the situation allows the praxic and reflexive observation by the patients themselves, of what their agonistic schemes are making both of them do to each other. Instead of each continuing to attribute the blame of the conflict to the other, they may then at some later point come to perceive and admit to each other their co-responsibility in the formation and perpetuation of their paining loops. This reflexive discovery with its reframing of unilateral blame into bilateral responsibility constitutes what we have called a majorative episode in the therapeutic psychogenetic sequence of majorative exercises. This new bilateralism is exploited in the next phase.

### **1.3.5 FROM MUTUAL INJURY TO MUTUAL SATISFACTION.**

Acquiring the goal and the means of deliberately co-abstaining from inflicting mutual pain opens the reflexive possibility of searching for alternative non agonistic schemes as means of co-operating for the mutual satisfaction of the initial interests that were displaced by those of the conflict. This requires moving the focus of reflexive equilibration one further step back, to centre on the reactivation and expression of the unsatisfied values behind the reclamations at the source of the paining loop. When partners do not provide some satisfaction to one another, this expresses the fact that they have made their own autoistic conflicting interest prevail over that of the partner. The conflict of interests is thus the basis of the agonistic conflict. But when expressed and negotiated it is also the basis of cooperation. However for this conflict to be resolved by negotiation, bargaining, mutual concessions, etc. the interests and values involved must be explicitly formulated, asserted and contrasted. Thus the re-expression of the agonistic conflict as a conflict of interests is a necessary condition to makes it negotiable, and to allow the co-construction of a consensual solution that achieves the mutual majoration of the values involved. But in the course of achieving this partners have performed a cooperative or equilibrated exchange.

The next phase of the therapy involves confirming this acquisition by extending its exercise to the rest of their unsatisfied values. By and while doing this the partners are in effect re-examining and re-negotiating the implicit “conjugal pact” that governs their conjugal division of labour and setting up a common sub-value system governing the invisible third element of the married couple: the community formed by the family itself, to the majoration of whose interests some of the participants’ need to be consensually subordinated. The completion of this re-equilibration process marks the final phases of the therapy. At this point

the heterarchic operation of psychogenetic equilibration has been re-established and re-exercised within this local field of activity in which it was locked in pejoration loops. The partners may thus autonomously carry on the spontaneous equilibration of the new values and conflicts their psychogeneses will inevitably introduce in the family system.

We must underline here that this level of reciprocity is that of practical every day morality, or morality in practice. It is that of a working partnership based on the exercise of mutual respect. The attainment and the active upkeep of this morality in “deeds not words” within conjugal and family exchanges is the necessary condition of the re-initiation (or perhaps of the initiation) of the mutual support and majoration “in good times and ill” that constitutes the higher level of moral reciprocity we have redefined above as that of the “indefinite majoration of the partner”. All next levels of reciprocity differentiate from their predecessor; its attainment is thus a necessary condition of further psychogenesis, but not a sufficient one. Therapy does not supplement or regenerate the hormonal highs of early infatuation, nor does it sustain the development of the humanity of mature love, however it can provide some of the latter’s prerequisites, as incorrigible or inveterate liars, cheats, frauds and bullies do not belong to the initial objects of the genesis of empathy, sympathy and durable attachment.

This course has a frequent bifurcation when the partners realize that their persistent conflict has masked the fact that they initially had too few shared or complementary values for the instauration of an equilibrated exchange, or that they have drifted so far apart that this has become the case. The final phases of the therapy may thus eventually comprise the negotiation of a non agonistic separation.

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