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Birth and Death of the Primeval Horde

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Abstract: ***Information interaction is at the origin of the variability of the state conditions of complex systems. It can be of two types which can be called active and passive, or of action and contraction. The action interaction produces a mass-to-energy transformation while the contraction interaction produces a mass transformation of energy. The horde achieved its survival goal by combining the two opposing modes into two men, one of whom assumed the dominant position and the other the dependent or gregarious position in the process of "gluing" ; thus by iteration of this process and that of the transfer of dependence from one dominant to another of higher strength (called in psychoanalysis transfert). In the early stages of the horde's development the chief and the gregarious were bound by an illusory reciprocal feeling of love, due to reciprocal necessity. But when the horde turned into a mass structure, the individual components, by virtue of their fungibility. lost their characteristic of special utility and consequently the interest of the chief. In the conditions of discontent thus determined, the shift, by a large part of members of the gregarious group, of the dependence impulse on the potential leaders gave them the strength necessary for the traumatic replacement of the holders of power. However, once reconstituted the condition of lack of obstacles to the exercise of the dominant impulses by the new bosses, a scorching disillusionment followed. This condition of periodicals, bloody revolutionary events finally blossomed into the stabilization of an overpowering power, with the transformation of all bonds of love into dominant bonds.***

Keywords: primeval horde, internal contradiction, horde's crisis

1. Physical foundations of the organization theory

According to the latest views of physics, being consists of elementary units called quanta. The space is also divided in quanta who are in informative communication with the adjacent quanta through the form taken by certain peripheral elements carrying a charge in one or more of the fundamental forces. The form of a quantum can be "recognized" by that of an adjacent quantum or it can be transmitted to the adjacent space quanta and through these reach those distant recognizeable, thus solving the long-term problem of remote action. [1]

What occurs at the level of quanta also occur at level of atoms, molecules or larger aggregates between which operate two types of information interaction, gravitational and electromagnetic, while in the first the information remains simple, at a single bit, in the second it grows in complexity with the size of the bodies between which it takes place.

Information, if recognized by a body, may give rise in this to the development of an action, transformation of mass into energy, or of a contraction, transformation of energy into mass [1] The first case occurs when the attraction, in which recognition is identified, does not find obstacles to its motor manifestation due to the presence of opposing repulsive forces as it happens in the second case, in which the attraction must overcome opposing forces to give rise to recognition.

According to the theory of general relativity, the variations of a physical phenomenon are of two types, linked to infinitesimal variations of the coordinates of the first and second order. The two types of variation are of opposite sign and occur on the same object. The variations of energy belong to the first type and the mass variations corresponding to them belong to the second type. This implies that the mass variations that occur in the phenomenon are infinitely smaller than the corresponding energy variations. Of course, the mathematical concept of infinitesimals can be replaced, in this case, by a precise relationship between the two quantities as it results from Einstein's famous formula $e=mc^2$ [2].

Introducing the operations of action and contraction, I refer first of all to Einstein's conclusion that if the principle of energy conservation is not achieved in a variational phenomenon, the transformation of the missing amount of energy into mass must be assumed. [3] So let's look at Newton's fundamental scheme of the gravitational interaction between rigid bodies. The mere addition of the spatial path of information to justify mutual feeling, a problem left unsolved by classical physics, does not change Newton's construction at all. He acknowledged that he did not have the solution to this problem and did not want to make assumptions [4]; it therefore confined itself to analyzing the phenomenon in its perceptible aspects. These raised the problem, to which I have already referred, of changes in kinetic energy that violated the law of energy conservation.

This problem seemed to Newton solved with the introduction of a potential energy, but this approach, in view of Einstein's results, must be corrected by replacing variations in potential energy with changes in mass.

We can then say that gravitational recognition determines the production of kinetic energy by transforming mass into energy (production of an action) or increasing mass by transforming energy into mass. (production of a contraction). The first case occurs when the attraction produced by gravitational information acts between two bodies in quiet or approaching motion; in this case it produces a continuous acceleration, with simultaneous reduction of the mass, which ends in the crash. The second case occurs after the collision when the information-induced attraction acts between two bodies in a motion of removal induced by a repulsive force; in this case it produces a continuous deceleration, with simultaneous mass production, which ends in the cancellation of the energy.

The transformation of energy into mass implies the contraction of energy and we know that, given the dimensional relationship between the two quantities, as shown by Einstein's mentioned formula, even massive energy transformations give rise to quantities of mass that are not perceptible to our level of perception of reality. However, in view of the principle of continuity, we must assume that the contraction takes place gradually and on gradually decreasing volumes.

Transformations that occur as a result of information interactions operating within the gravitational force are therefore not able to create or destroy elements of mass; they can only lead to an increase and decrease in the bonds of interdependence between existing masses (introversion and extroversion of energy). It is evident, in fact, that energy does not need any substantial change in the production of contraction, but only to bend under the action of gravitational force by wrapping itself around the bodies to be bound. The creation of mass point elements, in which energy wraps around itself, requires the intervention of nuclear forces and is a subject extraneous to our current interests.

Energy-mass transformations and vice versa therefore only change the state of the same physical entity; in the same way that water can occur in gaseous, liquid or solid states, the matter of which the bodies are made may occur in the state of energy or mass in varying degrees depending on the amount of energy transferred to the bonds.

Thus, gravitational attraction is a property of matter that manifests itself in all its forms of aggregation, with an intensity equal to the size of the aggregation, therefore decreasing passing from mass to energy and finally to space, which is also matter, as Plato has already stated [5] and confirmed by Einstein who demonstrated its gravitational capacity, then being matter [6].

However, although gravitational attraction can reach enormous aggregate sizes, it does not determine the functional integration that opens the door to the formation of complex systems. To achieve this goal it is necessary to consider the recognition processes in which the information elements are supported by electromagnetic forces. We therefore consider bodies placed in contact with each other by a simple pressure and whose peripheral elements that form information, associated with electromagnetic forces, are more numerous than in the case of gravitational forces.

Information in this case is a complex phenomenon in that it is not solely dependent on the nature and number of information elements facing each other and, of course, on the charge associated with each of them. The extent of the force developed between two elements, which can be both attractive and refusal, varies extremely rapidly with the mutual positioning within the network of interactions between the components of information, especially as regards the level of approach. This means that the same elements that are compared in a recognized process can give rise, depending on their positioning, to an infinite number of penetrative profiles to which different recognized results correspond.

The change in pressure, therefore, by inducing changes in the reciprocal position of the information elements, constitutes an important modifier of the extent of recognition. In particular, it can change the balance of forces between attractive and repulsive forces. We can therefore believe that between bodies of a certain size, one or other forces can take the prevalence on the basis of stresses coming from outside. Assuming that the attractive forces out per dense the opposing forces to a greater extent than is necessary to achieve aggregation, the aggregate retains an attractive differential that allows to iterate the aggregation with another aggregate

Within electromagnetic information interactions there is the same division into interactions of action and contraction corresponding to processes of extroversion and introversion of energy that we have seen in the context of gravitational interactions. In particular, the formation of mass at the expense of energy in contraction consists in increasing the intensity and extent of the bonds formed by energy by wrapping around the bodies to be bound. At the atom level, the attraction produced by the nucleus bends the trajectory of the energy-carrying element, the electron, which can serve two atoms, thus determining their aggregation (chemical bond of covariance).

2. The theory of organization

A set of moving bodies, subject exclusively to the forces of mutual gravitational attraction, forced into a limited volume, such as an ideal gas, cannot evolve towards any form of order and organization; maintains the state called maximum entropy to which corresponds the homogenization of the state of the bodies throughout the set. If energy is added, in the form of disordered kinetic energies, for the tendency of energy to tensional discharge and then to the disappearance of tensional differentials on the occasion of shocks (Carnot and Clausius), the system returns to the inertial state of maximum entropy (second law of thermodynamics).

The formation of order is achieved by eliminating from the whole the destructive effects of shocks, with their induction of tensional homogeneity and directional symmetry constraints, creating a common direction of movement through the action of a current of adequate intensity, penetration and persistence coming from outside (Prigogine order principle in open systems [7]). This condition allows the forces of attraction acting between components in parallel motion to compete with the forces that support the latter thus achieving a gradual convergence to the condition of contact. Under these conditions, as we have already seen, electromagnetic forces associated with their form elements, i.e. the "information interactions" act between bodies.

During the phase of gradual approach, through selection within the context of infinitesimal random modulations of the information elements, modifications of the information structure are carried out which give rise to an increase in the recognition force, thus leading to an increase in the cooperative discharge finally obtained in the condition of contact.

However, in addition to cooperative discharge, i.e. in the direction of parallelism, the bodies are subject to an attraction to this orthogonal which may give rise to an action or contraction depending on the conditions agents around them. For mild levels of pressure, despite the strengthening of the recognition forces resulting from the modulation of the information elements, the bodies can remain spaced by refusal forces that constitute a peripheral barrier to their juxtaposition. It is only when a recognized attraction or pressure of such size is realized that it overcomes the opposition barrier, thus realizing the condition of contraction, that the attractive forces become ligament forces. Thus, while the recognized link exists and persists, the bodies can approach or move away depending on the size and direction of the forces they encounter in the movement and there may be conditions in which the two processes alternate

In addition to the action of a one-way current coming from outside, the condition of motor parallelism and subsequently aggregation can also be achieved in another extremely important way for the purposes of the discourse we are carrying out According to classical mechanics, if in an open system the kinetic energy exceeds a certain value, the so-called "escape value", the gravitational field can no longer retain components moving in a centrifugal direction, which therefore inertially continue their motion. According to the theory of relativity, instead,, during the escape expansion and on large distances occur, in addition to the reduction of gravitational attraction to the center of gravity of the system, already considered by classical theory, mass energy transformations that involve an increase in the attraction between the fleeing components and the consequent transformation of their motion from divergent to convergent, ultimately giving rise to aggregate processes [8].

The result can be extended to more general conditions in the sense that, in the absence of a strong local gravitational field and in the presence of large distances between molecules, other molecules can, even if distant, produce gravitational attractions capable of modifying the direction of the trajectories of the molecules in conflict, and it is therefore possible to realize, within an extensive configural variability, of local parallels that lead to aggregation. This is the case with nebulae that give rise to a certain frequency of aggregations, albeit for second-order infinitesimals, which constitute accretion nuclei and ultimately lead to the collapse of the nebula and the birth of stars.

With the increase of the attractive forces of recognition there are increasing effects of aggregation and interdependence. There is a critical condition in which the strength of the aggregate bonds reaches a level such as to lead to a condition called "synthesis" (in the chemical field) or "gluing" (in the astrophysical context) in which the components lose their individuality and the aggregate behaves like a unit. In general, a condition of inequality of the attractiveness exerted is established between the components of the aggregate under synthetic conditions. We will call “dominant” the element of greater strength and "gregarious" the element of least strength.

In the binary aggregate under gluing condition, the sensory stresses that solicit the gregarious component instantly reach the dominant component, so that the two components lose their individuality and appear to constitute a unit with regard to interaction with the outside world. However, the two components make a different contribution to the determination of the functional and dimensional aspects of the response to sensory stimulation. The contribution of the dominant component is predominant in determining the characteristics of the response. In other words, the aggregate has in itself a hierarchical structure that manifests itself through the flow of information that passes through the connecting elements.

So we see that within the phenomena that we perceive and that are therefore part of our real life, a condition of destruction of any order and tendency towards the homogenization of states is achieved but that at the same time there are phenomena of construction of aggregates in cases where motor parallelism and the related phenomena of information and recognition can be determined.

These phenomena occur by infinitesimal variations that escape our perception until they reach a certain critical dimension. In the aggregate that is being built, a state of in homogeneity between groups of elements and a network of interconnections between all the components develops. In this network information coming from all the constituent elements flows.

The iteration of the aggregation process that occurs when also the aggregates are in conditions of motor parallelism makes the resulting aggregate assume the structure of a layered network in layers of different rigidity, where rigidity must be understood as the force by which the layer imposes its component in the response to a stimulus. This structure then defines a complex system.

Thus, while the thermodynamic set, with disordered motion of its components tends towards the maximum entropy to which the "thermal death" corresponds, i.e. the uniformity of the microstates throughout the system, the set of aggregates obtained by gluing tends towards the maximum negentropy, that is, towards the maximum internal differentiation of the system, which can take place in an infinite number of ways , which corresponds to the infinity of creation.

Gluing [9] is a complex phenomenon, of extraordinary importance for understanding the structure of the physical world whose first intuition can be traced back to Aristotle "the whole thing is greater than the sum of its parts"[10], but which has also found its place, in wide-ranging philosophical treatments such as those of Leibniz [11] and Hegel[12]. The stunning aspect of the gluing process is that with it a creative activity develops, an entity is born whose characteristics are no longer traceable in the component elements; oxygen and hydrogen give rise to water that does not even preserve the memory of the component elements. And this creative activity has no limits, it's infinite. This is the amazing part of the organizational process, what Corning rightly calls the magic of nature[13].

3. Application of physical theory to the development of social organization

In many cases we know the physical processes by which bonding is produced, but we do not know how these steps can produce the qualities then produced by the aggregate. For example, in the case of chemical reactions of synthesis, which is the name that in chemistry takes the bonding process, we know the mechanism of positioning electrons in the various orbits following the criteria of minimum free energy and the principle of exclusion without understanding how the functional properties of the immeasurable amount of substances that can be produced can result. Another example is the development of DNA. Within very complex systems such as animated beings, the information of the final product is obtained by the succession of information influenced at each stage of the iteration process of gluing from extremely variable external conditions. And so the probability that you randomly have the formation of many systems with the same information structure tends to zero as the complexity of the systems increases. It is therefore necessary, in order for the formation of an animated being not to stop at an early stage, that the sequence of information variations that have produced the system at the various stages of the training process be stored in its final information, so that reproduction for evolutionary purposes can be achieved by acting on simpler compounds that are easier to find, which makes it take on a huge dimension.

In biological organisms, therefore, information takes on such a dimension that it occupies the central part of the cell, constituting the deoxyribonucleic acid, that is, DNA, but also preserves a peripheral component that has as its fundamental element the sexual attraction that allows that interpenetration that leads to the informative interaction between the DNA of different cells.

There is a close interconnection between the two information structures. We have had occasion to point out that information can be modulated by external interventions proceeding towards progressive increases in the recognized attraction which, developing by overcoming opposing forces of rejection, are contractions, therefore variations of the structural connections of the system that must therefore appear in the DNA. But such variations, as we know, occur for infinitesimals of the second order, therefore for individual quantities not perceptible; however, as their integral grows, it begins to appear, first in the epigenetic variation and finally in the genetic mutation that is therefore not at all random, as previously thought.

The functional qualities resulting from this new information structure are amazing. The first, fundamental, is the multiplication of the supporting energy elements of the form elements which are no longer made up of their own elements, the electric charge, but external sources, such as electromagnetic waves or acoustic waves which, by affecting a system, retain its shape and transport it to the recognized comparison of another system. In this way, the mutual dependencies developed by gluing between the components do not require the existence or permanence of a contact condition. The bond becomes a state condition of the component and can exist indefinitely even thousands of kilometers away (a phenomenon called entanglement).

The components can therefore have relative motion while maintaining mutual dependence. It should be remembered that gluing is obtained by contraction of the energy which is transformed into mass: the aggregate obtained contains, in the form of diffuse rigidity in the bonds of dependence, an accumulation of energy that can be released from the commands coming from the dominant element thus producing forces interacting with the other forces acting in the physical environment in which the aggregate is located. And the reverse process is possible, that is, a contraction that involves a strengthening of the bonds at the expense of internal kinetic energy, thus determining instead of a force acting on the outside, a rigidity that resists external forces.

Therefore, consider the components of an aggregate among which there is a network of informational dependencies that bonds each component to all the other components that travel consequently with coordinated motion forming a wave. All components receive instantly through the network information on the existence and location of an action coming from an external system. This causes each component to match the point of impact of external action realizing the contraction of the aggregate and thus forming a rigid body that resists changes in its state. Ultimately the aggregate produced by gluing can have an internal kinetic energy that differs from the internal kinetic energy of a thermodynamic set for coordination due to the information bonds that hinder the realization of shocks between the components and thus give rise to wave motion.

As a consequence of these developments, a more complex articulation of information function takes place in animals. The information coming from the surroundings stimulates the animal's sensor organs, determining an internal image of this surroundings and an attractive or repulsive tension load associated with the different elements of the image, assuming the psychological terms of pleasure and pain.

In man, therefore, any information related to external reality takes place through the sensory apparatus and this information can be associated with an attractive condition, of pleasure or repulsive, of pain. Thus a feeling of pleasure can be associated with the sight of a panorama, listening to a melody, tasting a dish, the perception of a perfume or the caress of the wind on the skin. And a feeling of pain can be associated with anything that interferes with the functional integrity of its internal organization.

What distinguishes sensoriality towards social relationships from sensoriality towards inanimate objects is the fact that if between two men, who already by the fact of belonging to the same species produce an excitation in each other's sensory images, there is also a commonality of interests or needs or desires, tjis introduces in each other's sensory images an additional attraction load, understood as a desire for collaboration in the achievement of the common goal.

The transmission of information about the common elements, capable of increasing attraction, is carried out by modifying the sensory image that is reflected in the

information produced and therefore in the sensory image produced in the other man. The colloquy that is thus established between the two men leads to a progressive increase in recognition, up to a critical point where the attractive load discharges, that is, it produces the action or contraction. We note, in particular, that the effects are different depending on the intensity of the tensional load with which the two men come into collaborative contact; from superficial and passing collaboration to an increasingly intense collaboration

However, we have seen that there are direct attractive forces that express a pleasure of mutual presence induced by collaborative pleasure and that it is to these forces that bonding is chargeable for their transformation, by a contraction process, in bonds. The fenomenon can assume different modalities depending on whether the bond thus constituted between two men is practicable by a more intense flow of energy in one of the two directions or is practicable with equal intensity in both directions. Correspondently an individual has an altruistic or selfish or peer-to-peer behavior of identifivation.

Aristotle had already represented thought, the cornerstone of psychic activity, as "*modulation of the sensory*" [14] followed by Tommaso D' Aquino with what became an axiom of scholastic philosophy "*nihil est in intellectu quod prius non fuerit in sensu*"[15] and then by Locke [16]. It's easy to show, to where we are now, how sensory modulation is, in very complex systems like humans, the thought.

In fact, the conversation between the opposed elements of form, made possible by the modulation of sensory images, has consequences not only in stiffening the fundamental element of recognition, the "password", but also part of the elements of behavioral coordination that recognition makes possible. This is how what we will call "behavioral memories" are formed and that we can match instincts, unconscious, archetypes. The stratification of rigid behavioral memories constrains the scope within which sensory modulation can vary and also includes associative memories, in particular logical memories. At this point the modulation of the sensory becomes thought, as Aristotle has stated. Of course, the modulation of thought is guided by the principle of pleasure, in the sense that this feeling accompanies modulations consistent with both behavioral memories and the excitatory state of the sensory " *Any reasonig is only a sort of sensation; if I am convinced of a principle, this means nothing other than that there is an idea that strikes more upon m*e" [17].

Therefore the set of behavioral memories and thought constitute the soul, seat of the mechanism of research of the elements of recognition that lead to the creative aggregation of the system. The soul is the only means, produced by the intelligence of the evolutionary process, that allows to face the variability of being that, being infinite cannot be addressed by a rigid structure whose variational possibilities are obviously limited. We live on a planet where a large number of elements of reality are stable and can therefore be controlled through rigid structures, consisting of behavioral memories; the residual variability, although still very large, then becomes of such dimensions that it can be controlled, albeit to some extent, by a research mechanism that is also variable, consisting of thought.

The attraction gradually increases over time and is a phenomenon that also develops on an evolutionary level, that is, between successive generations if it is a persistent parallelism until it becomes a need for integration that gives rise ontologically, after final steps, to the aggregate process. Perhaps the most important example is the sexual impulse and I like to recall in this regard, how already Stendhal in his essay on love characterized the process of falling in love as consisting of small progressive steps, a process that he had called "crystallization" assimilating it to the process of formation of certain salt crystals that proceeds slowly for small successive additions [18]. And the attraction that precedes gluing can precisely be considered a falling in love even when it proceeds genetically, where the small visible step, but which can be the sum of even smaller steps not perceptible, is mutatio.

The nature and size of the elements of common interest that trigger parallel progress can be the most varied in the context of possible social relationships and it is these elements that determine whether this first link can pave the way for the development of aggregate forces from the inner most internal instintual strata of the system, a development that can produce the final bonding condition with which it is associated, in addition to a higher level of pleasure, the loss of individuality and the formation of a condition of disequilibrium within the aggregate, a precondition for self-organization. [7]

The sensory organs that receive the information coming from outside adding to the touch, which receives the contact-related information, are evidently in the same number of the new mediaging forces, but touch is of fundamental importance in carrying out the drag on the same object of the other sensory organs and in producing the bonding condition. The dominant component does not only receive all the information coming from outside; it also receives those coming from the inside on the state of the components and therefore talso the feeling of hunger which is added to those of pleasure and pain.

In the early stages of the development of the social system, touch was the absolutely prevailing meaning. In today's homo sapiens sapiens, instead, the open communication channels, such as speech, attitudes, etc. are so many as to make possible a relationship of "friendship" where rewarding elements that is, productive of pleasure are exchanged, without the need for tactile emotional communication. But caress, in all its intensities, forms and ways, remains the fundamental vehicle of the most intense relationship of "love", regardless of the sex of the congressmen [19].

4. The motivational dichotomy of australopithecus

In the case of our ancestor it cannot be said that among the members of the species who survived the geological upheavals that forced them to a descent from the tree there was a motivational parallelism of such dimensions that they led directly to gluing.

The presence of elements that prevented the existence of total motivational parallelism was due to the conditions of extreme food shortage caused by catastrophic geological and climatic events. The gradual and continuous reduction in the livelihood offered by the forest area had certainly led to a need for continuous reduction in the number of survivors and the consequent development of fierce competition for survival.

This had led to the formation of a condition of fear and aprioristic distrust of the other; however, it was absolutely clear that a minimum level of aggregation entailed an increase in power of such magnitude as to make it indispensable for survival. Therefore, the aggregation process was made possible by the very high and predominant level assumed by the need for association on both sides of the relationship, a condition that led them to adopt behaviors appropriate to the expectations of the other party. However, it was necessary to intervene elements of "reassurance" that differed somewhat depending on the character typology of the individuals who intervened in the aggregation process. In the context of the bonding between gregarious, the development of a homosexual attraction, although, as we will see in the next paragraph, with the mediation of female sexuality, allowed a sharp fall in mistrust. In the context of the bonding between dominators and gregarious, the elements of reassurance were the transfer process, always mediated by female sexuality, which gradually transferred to increasingly strong individuals the condition of dependence of the weakest and the process of strengthening this dependence due to two reasons.

Firstly, the elimination of a great fear resulting from the protective intervention of the partner or, more importantly, of the head of the horde automatically led to the tensional discharge of the system and the related development of a sharp contraction, i.e. strong bonds of dependence. Secondly, because any organisation facing much larger opposition forces, as in the case of the horde, must be made up of a number of individuals, varying within a very narrow range; in the structure thus constituted, the components must act in extreme coordination and mutual closeness and are all indispensable; the loss of even one component can endanger the survival of the entire group. For this reason the care and protection of all components were in the vital selfish interest of the head, but could be experienced by the gregarious as a manifestation of an objective dependency relationship, therefore a contraction effect even of the head, not related to the situation of subjective advantage of the moment. In psychological terms the gregarious's perception of the boss's love was "illusory."However, the relationship became a real exchange relationship when in the character of the dominator next to the dominant component there was also an important gregarious component, which in this case took on the aspect of an recognition of its importance. Clearly, the associative relationship between the rulers could only exist at the utilitarian level determined by the existential situation in place.

The problem of the formation of the bonding constitutive of the horde is made complex by the fact that both instintual instances dominant and gregarious live together, albeit to varying degrees, in all individuals so that the same man can behave as a dominator in one relationship and as a gregarious in another. The existence of a bipolar relationship between the desire for power and the desire for protection, is a structural instinctive component of the human soul detected by Freud [20] but whose knowledge was already contained in the field of Greek art and mythology as well as in the poetry of Catullus. *Odi et amo. Quare id faciam fortasse requiris/ Nescio, sed fieri sentio et excrucior*. [21].. The problem is also made complex by the fact that the frustration of the gregarious impulse can be compensated by the satisfaction of the dominant impulse, but the opposite is not true; the frustration of the dominant impulse cannot be compensated.

Let us return to the fact that for the dominant element the presence of a certain minimum number of gregarious was a fundamental indispensable contribution of power, a condition that determined its high value and the fact that the value was diminishing as the availability of gregarious was growing. Thus the history of horde development must be considered to consist of several periods: an initial period, in which the minimum number was formed, in which the usefulness of the gregarious for the dominant was very strong, a second period in which the number of gregarious components went beyond the minimum and whose usefulness for the dominant, while remaining, diminished, and finally, a third phase in which the usefulness of the overtime was for the dominant almost zero.

The overestimation of the affective contribution of the dominant by the gregarious could persist even in the second period of development as a result of the action of the powerful psychic agent consisting of illusion, that is, the autogenic completion of the satisfaction of a impulse not completely satisfied, but nevertheless necessary for the production of certain fundamental effects of the impulse. However, the increasing disvalue on the part of the dominant with the increase in the number of gregarious that became fungible with this reducing the extent of the protection individually exercised by the dominant for all gregarious became, beyond a certain level, manifest making impossible the compensating action of the illusion.

5. The mediated action of female sexuality

Let's go back to the starting point of the aggregate process, where the partners recognize the same goals in the other and start that informative interview that increases recognition. We note the fact that the implementation of this process requires that the possible partners come into contact, and this even seems impossible in the conditions of fear and mutual mistrust existing.

Let us therefore consider in more detail the developments of the organizational cell starting from an early stage, the one in which our ancestor lived in a heterosexual couple. The condition of isolation did not guarantee survival; therefore the couple had to seek a strengthening of their existential condition through the formation of a strong bond, of gluing, with other individuals. It does not seem possible that the urgent need for help directly produced a condition of mutual excitement between males because, as we know, there was a competitive relationship between individuals for the intake of available food, a condition which prompted the impulse of

mutual fear. There was, however, a relational path, consisting of the sexual attraction between the male of one couple and the female of another who reached in very frequent cases a power such as to overcome mutual mistrust

Sexual intercourse is the oldest, in place since time immemorial before the formation of the horde, of the numerous relationships that are identified by the recognition relationships. We have seen that recognition is a state of mutual attractive excitement, produced by "complementary elements" in the interacting information that can be gradually increased to a certain level where is produced the aggregation and at even higher levels the gluing. The excitation of the male discharges into the ejaculation during which it can still undergo increments based on the information coming from the female (the return of desire) which results in a greater intensity and duration of the ejaculatory process and the pleasure connected to it. (see approach phase before impact in Newton–Einstein gravitational interaction process). In the female, on the other hand, the discharge of excitation takes place through separate organs and new excitation can occur at the same time as the discharge then in different directions giving rise to a contraction (see phase of removal after impact in the Newton–Einstein gravitational interaction process). [22]

So in the female a contraction is determined with formation of gluing bonds, so as to determine a pleasure of belonging. It is not a question of submission, which undergoes a back down to the violence inherent in the action, but of creation of freewill bonds of belonging in view of the consequent effects of protection. In fact the bond created is not exclusive; the female protection increased through links with stronger males (transfert) and maintaining multiple relationships that imply belonging to a group, so obtaining the condition of maximization of the protection.

I agree with Girard's approach that the female was the "mediator of desire" where the mediation action was born as a "mimetic" or imitative effect [23] and therefore undoubtedly constituted a key element, the "glue" in the process of social gluing The establishment of such relationships allowed to overcome mutual mistrust, the emergency of the call for help, the development of attractive forces among males that led to homosexuality and finally to the collettive gluing.

Thus, with the repetition of the organizational process described, the first horde of Darwin and Freud, powerful war machine, was realized, whose effects were enhanced by the subsequent technological development consisting of the agricultural and metallurgical revolutions that involved the complete solution of the food problem and the invention of deadly weapons, such as the spear, the slingshot and the arrow

6. The Horde Crisis

In the absence of the stake of containment of aggressiveness consisting of the need of the gregarious, and as a result of the fungibility and the numerical increase of the gregarious, the horde became a ferocious structure towards the weakest and this simply because the satisfaction of the will to power maintains in the dominators a component of pure aggressiveness.

Thus a condition similar to that before the formation of the horde was thus established, albeit within controlled hierarchical lines, a condition that is still so existing today: Plautus [24] introduces the expression, reused by Hobbes [25] "*homo homini lupus*". For Schopenauer the awareness of the violence inherent in social reality is masked by the veil of Maia, that is, by the veil of illusion and deception [26] , a vision taken from the "Veda" Hindu sacred books.

The deterioration of the exchange relationship led, in the weak character of the gregarious, to the introversion of instinctual charges, that is, to the development of fear due to the loss of protection and behavioral guidance, a condition that in psychological terms is called depression and that leads, in extreme cases, to psychotic states.

Under depressive conditions weak individuals remain open to grouping alternatives (transfert) to allow a better balance of impulses, i.e. they place themselves in pre-revolutionari conditions so that the first effect of discontent was to harm the internal, participatory unity of the group. Participatory, fideistic submission, experienced as an act of love or at least as a protective exchange, became a painful participation, experienced as an act of violence. And if there was an alternative the move to the new group took place even before it had taken on real power, while it was still in the nascent state, of movement. This because participation in a movement allows illusory discharges that escape the destructive action of reality as verification is postponed to when power will be achieved.

In these conditions, the shift of dependence by a large share of the gregarious on potential leaders gave them the strength necessary for the traumatic replacement of the leader which followed, immediately afterwards, having reconstituted the condition of lack of obstacles to the exercise of the dominant impulses of the new bosses, a scorching disillusionment in the weak stratifications of the group.

This situation, although it had to last many years, finally came to an end. Finding that the achievement of the top power entailed, at a shorter distance, death, already into the horde pushed potential leaders to an agreement to share power. From this agreement borned the democracy in agricultural villages, then preserved in some important city states, most of which finally restored the monocratic government by virtue of the possibility, given by its size, to constitute large repressive forces of gregarious people attracted by privileged treatment

It is important to note that the victory of the dominant component with the achievement of a certain stability of power was due only in part to the agreement between the members of the ruling class and the establishment of large repressive forces; another important cause was the inability of the gregarious to produce power-controlling structures, so that, as Marcuse observed for the democratic elections [27], for the gregarious the only result of these battles was to periodically change the boss.

There is no doubt that an important factor for the final victory of the dominant was also the tiredness of the population forced to live for an endless time in an almost permanent state of war, a condition that led her to be exhausted and to accept with pleasure the tensional discharge induced by the end of the fighting with the rendering without conditions. Slavery, i.e. total possession, thus replaced the relationship, real or illusory, of exchange of importance that constitutes the love.

It should not be forgotten, however, that the dominant, aggressive impulse was in any case the second impulse of importance also for the gregarious so that the acceptance of submission to power gradually found compensation in the development of the dominant impulse in all the other social, hierarchical and family relationships in which the individual was able to place himself in conditions of power. This naturally left the individuals at the lowest level of the social ladder unimportant, as well as the females, given as property to each male in order to allow him to have his own exclusive dominant outlet.

Throughout all the phases of revolutionary transformation that followed the horde crisis, power never actually escaped the ruling class, albeit with the succession of masters in command. The power could therefore impose instinctual modifications accompanied by punitive actions of such ferocity and lasting many years as to constitute an artificial quick evolutionary selection of the same type as those made by breeders to change quichly the shape, size and any other character of the dogs.

Of course, the instinctual repression imposed was aimed at destroying the organizational capacities of the population with the consequent bloody massacres and riots induced in the area of power. Without these repressions, the possibility of carrying out these periodic massacres could not be completely stifled. The dominant leader could be born within the mass and treason within the ruling class was always possible by virtue of competition for succession to the highest level of power. It was necessary to prevent associationism from taking on a certain critical dimension from which the antagonistic organizational process could easily develop for self-organization.

The repression imposed by the victors was the imposition of constraints aimed at preventing the relationships of love, the cornerstone of the organization before the crisis, replaced by dominant relationships and total possession, thus facilitated by the fact that these relationships, as we have just said, the expression of the second impulse in importance even in most gregarious characters

The repression therefore mainly concerned male homosexuality, female sexuality, internal family sexuality and also covered many other secondary aspects that are not necessary here to list [28]. These elements have suffered a repression of extraordinary ferocity for about twenty thousand years (think of the resection of the clitoris, the stoning of adultery, circumcision, ferocious punishments for homosexuality and incest). And they have achieved the goal by profoundly modifying the gregarious became a ferocious beast not only towards the enemy but also within the society, like the rulers. Internal relationships of love replaced with dominant relationships and possession. Huge aggression has developed within the system in both official hierarchical lines and rebel movements.

This applies to the majority of men but not to all: there are men who have a balance between the dominant impulse and the gregarious impulse, internal circuits of self-evaluation and behavioral memories that inhibit aprior dependence, who know how to set the relationship with others in terms of exchange and give enormous importance to the return of desire , that is, the free choice of partner. But in reality all of us men, strong or weak, part of power or mass, are slaves to our impulses and the forms they take in social reality, to faiths and prejudices, and finally to the illusions and hopes that they impose on us.

References

[1] Firrao S.: “Origin of Action” in International Journal of Science & Research (IJSR) vol. 9, Issue 3, March, 2020, Can be download by the site of Journal: www.ijsr.net
[2] Einstein A,: “Sulla teoria generalizzata della gravitazione”, in Le Scienze, 1968-2018, pag. 68
[3] Einstein A.: “Über die spezielle and allgemeine relativitäts-theorie”, Lipsia 1916
[4] Newton I.: “Principi Matematici della Filosofia Naturale,” a cura di Alberto Pala, UTET 1989
[5] Platone: “Timeo”section 2, 209b
[6] Einstein A: “Vier Vorlesungen über Relativitätstheorie”, Friedrich Vieweg & Sohn, Braunschweig, 1922
[7] Prigogine I.: “Self Organization in Nonequilibrium Systems”. Wiley & Sons, New York,1977
[8] Firrao S:Development of Oscillatory Processes in Isolated High Energia Systems, Cybernetica, XXXI,4, 1988
[9] Firrao S.: “Sui fondamenti della fisica dei sistemi complessi”, in Studi sui Sistemi Complessi, ed. lulu.com – ISBN 978-1-4476-3406-3
[10] Aristotele: “Metafisica”, VIII, 1045, 9-10 a cura di G.Reale, Bompiani, 2000
[11] Leibniz G.W.: “Monadologia” Morcelliana, Italia, 2021
[12] Gadamer H.G.: “La dialettica di Hegel”, Marietti, Italia, curatore R. Dottori, 2018
[13] Corning P.: ”Nature's Magic, Synergy in Evolution and the Fate of Humankind”,Cambridge Univ. Press, 2003
[14] Aristotele: “De Anima”, 3, 427a, 427b, 428b, ed.Laterza, Bari, 1973
[15] D’Aquino T.: “Sulla verità”, a cura di F. Fiorentino, Bompiani, Milano, 2005 [16]- Locke: “Saggio sull'intelligenza umana”, libro II, Cap.1, paragrafo 5, Univ.
[16] Laterza, 1972
[17] Hume D: “Trattato sull’intelletto umano”, Laterza, Bari, 1972, parte prima, sezione prima
[18] Stendhal: “Dell' amore”, ed. Einaudi, Torino, 1975
[19] Freud S.:”Tre saggi sulla teoria della sessualità” in Opere, vol.4, Boringhieri, Torino, 1970
[20] Freud S.: “Totem e Tabù” in Opere vol.7, ed. Boringhieri, Torino, 1970

[21] Catullo G,V.: "Carmina", Carme LXXXV, a cura di N. Gardini, ed. Feltrimelli. Milano, 2014
[22] Cicerone M.E.:"Tra scienza e legenda", e "Il piacere misterioso", Mind, febbraio 2020. Le Scienze, Roma
[23] Girard R.: "Menzogna romantica e verità romanzesca", ed. Bompiani, 2002
[24] Plauto T.M.: "Asinaria" II, 4, 88 ed,Rizzoli, Collana BUR, Milano, 1994
[25] Hobbes T: "De Cive, Elementi filosofici sul cittadino," a cura di N. Bobbio, ed. TEA, 1994
[26] Schopenauer A.: "Il mondo come volontà e rappresentazione", Mursia, Milano,
[27] Marcuse H, "L'uomo a una dimensione", ed. Einaudi, Torino, 1967
[28] Firrao S. "Il potere e la paura", ed Lulu.com, 2012 ISBN 978-1-4716-1821-5