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Complex Social System Theory

—The Systemic Meaning of Illness Pain in Contemporary Modern Society

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Abstract

Since pain's meaning changes over time within scenarios that are a product of collective consciousness, how has the objective form or social meaning of illness pain changed over time in our modern contemporary society? How has its manifestation or communicative expression changed? How have the relationships that it generates changed? Today, does it really generate relationships? In order to answer these questions, the meaning of illness pain in Western modern contemporary culture was placed within two major worldviews that were its precursors: Greek tradition and Christian tradition. Then, today, there is a new, unexpected, illness pain meaning codification that has rejected and replaced the Greek and Christian pain tradition, that is, *technologization* and *medicalization* of illness and illness pain. In this paper, changes in the semantic codification of illness pain as well as its risks are argued. They are "explained" by a nonlinear conception of the social system that is expressed in a systemic micro-macro-micro perspective. Indeed, Complex Social Systems Theory explains in a single theory—in the Luhmannian perspective, that is, in the social perspective of emergence, self-referentiality, and autopoietic self-organization concepts—both organization change and organization stability of social systems, departing from unilateral conservative or progressive theories. The main hypothesis is that hospitalization, as a consequence of contemporary technologization and medicalization of illness and illness pain, has increased sufferers' loneliness.

Keywords

Illness Pain, Greek and Christian Pain Tradition, Technologization and Medicalization of Pain, Complex Social Systems Theory

1. The Justification of Social Complexity in Illness Pain

The concept of illness pain implies the suffering concept. It is a physical pain due

to a fragility caused by illness. And it is a psychological suffering due to a fragility that prevents sufferers from making what they are used to making and from having prospects for the present and the future. In other words, the suffering is the internalization of physical pain—bodily symptoms—into a psychological experience, into a psychic, moral, systemic, and spiritual pain. This means there is a circular connection between psychological and physical pain of illness.

Here, Sociology comes into contact with the Phenomenology and the Philosophy of pain. Sociologically, illness pain is not *sic et simpliciter* an individual experience which is inherent in how the individual lives his pain, but it is combined with a meaning change that confirms the idea that the social system is a complex system. The social continuous meaning change of physical and psychological illness pain cannot be understood without this new systemic conception. Indeed, it is precisely this objective change in meaning that, although it is viscous, is recognized as the hallmark of the social and demonstrates that the social system is an unpredictable, emergent, dynamic system, a system that changes, and changes in unexpected ways, with unpredictable effects, "disappears, becomes thinner, abandons its actuality due to its intrinsic instability" (Luhmann, 1984: p. 154)—a complex system. The way of conceiving the social system changes, and its definition has to change, where nonlinear determinism signifies complexity in a micro-macro-micro rapport between system and environment.

This framework allows us to explain the object of this article by new systemic terms, by the novelty of what the social system is and how it functions. In complexity language, unpredictably individual consciousness triggers illness pain, meaning change, and this meaning change is unpredictably codified by society until the next illness pain meaning change by micro. The sufferer expresses his illness pain through social meaning by which this pain becomes objective, and the social system—the meaning communicative of the macro-society—changes pain meaning and relationships in an emergent and unpredictable way. This change is triggered by individuals, the micro, which are never completely flattened by institutional constraints. Then, the *form* of illness, pain meaning, and pain expression are indicators of cultural criteria. Pain meaning changes are linked to historical and social time, and emergently, unpredictably, social system complexity determines the meaning of structures.

Considering that illness pain meaning and illness pain manifestations as well change over time, and that its codification is a *social product*, that is, a product of collective consciousness, how has the objective form or codification of illness pain meaning changed over time in our modern contemporary society? how has its manifestation or communicative expression changed? and how have relationships that illness pain generates changed? And today, does it really generate relationships?

To answer these questions, although many other cultures possess models of suffering, the Western modern contemporary meaning of illness pain, as well as the manifestation of suffering and its individual perception, have to be placed within

two major worldviews: classic Greek tradition and Christian tradition. Today, these traditions have disappeared or have become thinner. Indeed, today there is a *new*, unexpected, illness pain meaning codification, its technologization and medicalization that has rejected and replaced the Greek and Christian pain tradition, and has increased sufferers' loneliness. This is an observation as well as my hypothesis.

Here, the semantic codification of illness pain and its risks in Western culture and society from a theoretical sociological perspective is argued. For this reason, the archaic and classical Greek world, Christian tradition, and contemporary modern society are argued. Since illness pain is in our historically changing social code rather than only an individual experience, it is "explained" by a nonlinear conception in a systemic micro-macro-micro perspective and Luhmann's complexity theory. Complex Theory explains in a single theory—in the Luhmannian perspective, that is, in the social perspective of emergence, self-referentiality, and autopoietic self-organization concepts—both organization change and organization stability of social systems, departing from unilateral conservative or progressive theories. By using the epistemological language of complexity, the progressive semantic and communicative-relational change of illness pain demonstrates the temporalized complexity of the social system, the momentary nature of its elements—meaning and action in relation—as well as its emergent capacity in the ongoing interdependence process between disintegration and systemic reproduction of meaning. The selection of illness pain meaning does not have a finality. The system can select meaning possibilities that are susceptible to being replaced over time by different meaning possibilities. In other words, the selective actualization of illness pain meaning is always precarious and unstable, precisely because of the redundancy of meaning possibilities that have to be actualized, from one possibility previously selected and actualized to another selection that has to be actualized to satisfy the need for systemic reproduction. Everything depends on the degrees of systemic freedom, on the range of connection and differentiation. By selecting and stabilizing emergently among many possibilities of illness pain meaning, social systems adapt their "arrangement of freedom with respect to time" (p. 456). Since they counterbalance the freedom with the formation of structures that perform this counterbalancing by connecting actions, in general, there is more environmental-individual consciousness turbulence, more necessary structural flexibility, and gradually less connection, more differentiation from environment-individual consciousness, and more symbolic freedom. So that here western illness pain meaning up to contemporary modernity can be argued. My main hypothesis is that contemporary technologization and medicalization have replaced earlier codifications of suffering, increasing sufferers' loneliness.

2. Social Complexity or the Nonlinear Change of the Social System

Changes in meaning and relational structures, often abrupt, unexpected, and unpredictable changes, reveal that the social system is a symbolically complex sys-

tem. The change in meaning and relational organization is a clear sign of *restlessness* and *creativity* of the social system—the instability and unpredictable organization changes in meaning and communication as fundamental elements of relational social systems and the resulting systemic capacity for emergence and innovation in a continuum between connection and differentiation, between disorganization and new systemic self-organization.

In this new framework, the meaning of social system changes, and the change in meaning and relationality is the new systemic organization emerging from micro-macro-micro. This means that a structural systemic change is triggered by the individual consciousness, which is the micro or social system's environment that ever produces meaning, interprets its relationships, and is never completely flattened by institutionalized constraints. For this reason, it is capable of constantly giving new meaning to the world, things, roles, relationships, etc., and upsetting social systems organization, meaning of values and norms, behavior expectations, that is, relational structures. This change is brought to its completion or final configuration by the social system, the macro, which autonomously from environment, self-referentially, emergently, unpredictably, reorganizes itself by selecting and stabilizing the meaning that adapts best to environment perturbations (those disturbances or inputs of meaning which are triggered by meaning that can ever be produced by the individual consciousness). It gives rise to an ever-new, emergent, and unpredictable social system, a new macro that falls back on the micro, allowing the individuals to relate until the next change in meaning, which is triggered by the micro and selected and stabilized by the social systems. Individual consciousness, micro, in unpredictable ways triggers a systemic meaning change that is unpredictably selected, stabilized, and codified by the social system or macro, e.g., society, that orients the micro until the next meaning change by micro. Thus, Prigogine's complexity definition is clear. According to this definition, the complexity is *essential unpredictability*, referring to systemic changes that are deterministic, but not predetermined, and unpredictable changes (Prigogine & Stengers, 1979). This means that every system is not defined by linear determinism but by nonlinear determinism and emergence. Indeed, social relationships, and the society as a sum of all social relationships, demonstrate that even the social system is not a static and predictable system, a system where the change has an asymptotic stability due to negative feedback that dampens inputs and returns the system to its previous state. The social system changes meaning of its social structures—behavior expectations, values, norms—and relationality in a unexpected and unpredictable ways due to positive feedback and to a micro-macro-micro relation or circular, reciprocal, system and environment (psychic or individual consciousness which completely is never flattened on institutionalized constraints and is always a potential producer of action between system and environment) (Luhmann, 1984; Condorelli, 2025a), structure-action. The progressive semantic change of social systems, or encoding of communicative-relational meaning, demonstrates system's *temporalized complexity*, the property of momentary meaning of its structures and action in relationship and of its emergent capacity in the ongoing process of

interdependence between disintegration and reproduction, In other words, the relationship organization change is a clear sign of social system's *restlessness* (Luhmann, 1984), that is, of instability of meaning and communication as momentary elements in their duration and capacity for innovation of the social systems and social system society in a continuum between connection and differentiation, between sistemic disorganization and new self-organization of relationship meaning. Sociologically, "having meaning" means that emergently, the social system, and above the social system, society, actualizes the meaning of its structures when what is already actualized is thinner. As mentioned, the way of conceiving the social system changes, and its definition has to change, where nonlinear determinism and emergence signify system complexity and micro-macro-micro rapport between system and environment.

In Luhmannian terms, the social system is a self-referential system, autonomous with respect to environment-individual consciousness, autopoietic, emergent and consequently unpredictable, nonlinear in its emerging cultural meaning which is implemented by the social system itself in its social self-reorganization process—or organizational change of meaning relational—between differentiation and reproduction (Luhmann, 1984; Condorelli, 2025a, 2025b). In this regard, the social system, but this applies to all systems regardless of their specificity, is *creative*. Today, democracy and pluralism, freedom, ambivalence, and equal rights are our cultural and social change compared to a historical-social past. This change emerges because ambivalence is freedom and social unpredictability between hypercomplexity—a new self-organization—and disorganization (Morin, 1977, 2008). For example, today, intimacy, that is, the couple system, is fragile. This means that the individual consciousness of women is an environment capable of producing a new relational meaning of the genre concept that is based on free choice. Women want to be free, individual, able to choose, able to be not only a mother and wife but also to work, to vote, to choose whom they love, as a man does. The contemporary modern social system, macro, autonomously, like a non-trivial machine, selects and stabilizes intimacy meaning change by admitting free choice, which, surprisingly, also means fragility in intimate relationships. The fact of separating when love ends has become culturally and socially "normal", a fact that is accepted (Luhmann, 1982; Condorelli, 2024). In an unpredictable way, that is, in a self-referential way, the social system stabilizes emergence and innovation in a continuum between connection and differentiation, systemic self-organization of relationships and disorganization.

Social complexity changes the classic structure-action relation and, in so doing, solves important social aporias. In fact, the way of conceiving the social system and its functioning is different.

In this respect, the explanation of the social system formation with its structures, its social order, and its change of social order is the problem that both micro and macro theories have left open. They assume that the action or the structure is the ontological premise of the explanation itself in a unilateral whole/part model.

On the one hand, the bottom-up conflation, the action determines the structure, does not solve the problem of social order. The individualistic approach explains the systemic structural change due to individual consciousness, which produces meaning, but it does not explain the systemic stabilization. Indeed, the stabilization presupposes the existence of a structure that orients individuals, an institutionalized normative framework capable of reducing a radical double contingency—each one does not know what he should expect from the other—to a state of uncertainty that can similarly be calculated by both parties. In short, the individualistic approach must reintroduce into the micro-macro model the structural constraints which it was supposed to explain (Addario & Cevolini, 2012: p. 7). On the other hand, the top-down conflation—the "whole", that is, the structure determines the action—explains structure stabilization but fails to explain structure change. And even here, structures are assumed as a given. This complicates discussions on individual subjectivity or consciousness and consequently on change. Since individuals are modelled by structures, individuals are a mere executor of social structures, and structures are understood within a framework of stability. The structure-action relation is interpreted in the classical Spencerian and even Parsonsian conception as a macro-micro relation. In the latter social system, with its structures of meaning such as expectations, values, norms, explains its individual parts. Although the social system is something more than the sum of its individual parts or individual consciousness, Parsonsian theorization does not seem to overcome the social order problem. It solves the contingency or opaqueness of mutual expectations within the theoretical assumption of a culturally determined and shared symbolic language. Social systems have a culture, that is, they have a tendency toward stability, toward the self-maintenance of order. Structures are a given. Therefore, the classic Laplacian-Newtonian theorization of systems as systems whose evolution ends in asymptotic stability is still evident in Parsons's theorization, which does not conceive "random variability with respect to a starting point" but rather "an ordered process of change" (Parsons & Shils, 1951: p. 107). It essentially does not explain the structure and its change.

All aporias that unilateral models of the whole/part relation generate are overcome by the advent of Complexity in Sociology. The new model of the circular system/environment relation—the bottom-up and up-down or micro-macro-micro model—questions the linearity and stability of the system. As we said, redefining social systems as complex systems implies a new understanding of social systems that do not function linearly, but rather function and express changes in meaning and relationality by discontinuity and emergence, by unexpected and unpredictable variability of structural configuration to which social systems, all systems, natural and social systems, are open in their relationship with the environment. As we said, the environment of social systems is individual consciousness or the psychic environment of the ego and alter. Each is an environment for the other in a situation of double contingency. And various subsystems of action are the environment of the social system of society.

Since social systems self-organize, emerging from the micro-environment that they surprisingly reorient in its relational meaning in a circular micro-macro-micro or system-environment relation, the Epistemology of Complexity changes the concept of social change. It can no longer be understood as a sequence of phases which are governed by linear historical laws expressing a proportional to input change approach. Social systems unpredictably change their structures, and this change is a nonlinear structural and organizational modification, not proportional to environmental inputs, emergent, with unpredictability and surprise inherent in emergence (the interdependence concept between system and environment expresses nonlinearity). Therefore, social system organization is surprising, and these moments of surprise express a new formation of structures. This means an unexpected recombination of chance and necessity that "intertwine in a dynamic, processual, relatively unstable way, and generate recombinations, varieties, and not simple reproductions" (Pitasi, 2024: p. 14)[1]. And this also means, as Luhmann (1984) underlined, that only the initial causes of change, for example, the aspiration to success as a possible source of conflict, a certain symbolic code, such as religion, also capable of motivating conflictual actions, imitation, fanaticism, radicalism, incongruence of status, technical discoveries (writing, printing, plough, steam engine), do not allow us to understand the functioning of the social system, that is, its actualization. Instead, since change is emergent, the micro-macro-micro contemplated by complexity allows us to understand the mechanism by which the social system functions and changes.

First, Luhmann translates into sociological language the system complexity that Prigogine developed in the field of physico-thermodynamics (Prigogine & Stengers, 1979). Here, it is essential to revisit salient points of his social theory, even if much will be repeated.

3. Luhmann and the Complex Social System

In New Systems Theory, Luhmann finds the conceptual tools suitable for a *General Theory of Social Systems* (interaction, associations, organizations, society). In this regard, social systems are *open to the environment*, *creative*, *emergent*, *operationally closed*, *surprisingly dynamic* or *dynamically surprising*, *autonomous*, *self-referential*, and *autopoietic communicative systems*. In a word, they are complex systems as communicative systems based on meaning. Everything has meaning to Us. Meaning and communication are not understood by Luhmann in ethical but functional and operational terms. In fact, regardless of possible ethical contents of behavior expectations, structures are a new synthesis of a plurality of possibilities of meaning, a "perspective of comparison between a realized possibility and other possibilities" (Luhmann, 1984: p. 468, our trad). In so doing, they orient individ-

[1]According to Pitasi, "if cultural traditions are understood as linear patterns of reproduction that are essentially identical or have a minimal variance, they do not exist. […] Cultural traditions who are rigidly linear sequences will inevitably crumble. This does not mean there is no a vertical transmission. This means there is no an automatic reproduction of the 'identic' but rather a recombination between fragments of imploded traditions and fragments of a new conception by the neocortex" (2024, p. 14).

ual choices and make them possible. For this reason, meaning and communication are the constitutive components of the social system, and the starting point of Luhmannian *Systems Thinking* analysis.

Indeed, Luhmann specifies that a social system functions by the micro-macro-micro rule where structural changes or new organization are triggered by the micro environment—once again, the individual consciousness is never fully flattened on systemic constraints of expectations, values, and norms. Each person spontaneously constructs and maintains their own identity, their own communicative meaning, which becomes the environment, systemic change's possibility, and then meaning is selected and stabilized by the social system itself for individual communication and relationships until the next change micro. Specifically, the environment is made up of self-referential systems that elaborate their own self-reference in the form of consciousness, whose ever-free capacity to interpret the world is the source of inputs that give rise to disorganization and systemic organization change. Self-reference of social systems assumes the form of communications, stabilizing them in an unpredictable way and consequently reducing the symbolic complexity of the environment-micro and of the social system itself. The difference between system and environment and their continuous process of differentiation is a micro-macro-micro relation. It replaces the difference between the whole and parts or the macro-micro model, and it is constitutive of social systems. The *structural coupling* between system and environment forms their unity as a coevolutionary unity of two differences or autonomies.

There is an evident analogy with Prigogine's dissipative structures and von Foerster's non-trivial machines. Even social systems are able to self-organize emergently in a continuum between disorganization and new self-organization, far from the range of organization lack or *entropy* (*far from entropy*, *at the edge of the chaos*). For this reason, even Luhmann's social systems are historical, dynamic, and indeterminable systems in their attempt to reduce complexity, to produce meaning, and self-organize by reducing that infinite multiplicity of possibilities of meaning to a dimension that can be experienced as an expression of an actualized meaning for action, and this through an incessant circular process of production and reproduction of their constituent communicative elements. Indeed, as we said, it is the social system society that selects and stabilizes among many meaning possibilities that possibility which is the most suitable to be actualized for action in response to environmental inputs coming from the individual consciousness and in so doing ensures the reproduction of the circular communication process, that is, the autonomous reproduction of communication through communication (*self-referentiality* and *autopoiesis* of the social system, Luhmann, 1984). This Luhmannian revision involves all systemic levels—starting with the coevolutionary unity of system and environment that is the relationship between ego and alter—where the meaning of the communicative social system, the so-called being, "depends on a selection that implies the possibility of the non-being and the being of other possibilities" (Luhmann, 1976: p. 509).

Self-referentiality of the Luhmannian social system is compared to that of the Parsonsian one. The transition from Parsons' *structural-functionalism* to the *functionalism of equivalences* (*equifinality*) as an anti-humanist, anti-historicist, anti-normativist and constructionist program for the description and explanation of social reality within a framework of complexity finds in the concept of *structural coupling* between system and environment the theoretical framework suitable for establishing that profound revision of Parsons' Agil model, which began already in the 1970s. After the 1980s, the conceptualization of autopoiesis and the self-referentiality of the social system in its relation with the environment, developed in *Soziale Sisteme* (1984), *Warum Agil*? (1988) and *Die Gesellschaft der Gesellschaft* (1997), marked Luhmann's definitive detachment from Parsons' macro-micro normativism (especially role norms). Luhmann's use of self-referentiality and autopoiesis concepts (autonomous reproduction or self-organization of the system through its own elements) which are borrowed from Maturana and Varela (1984), operational closure and emergence concepts leave behind the mechanistic and homeostatic conceptualization of social systems that still influences the Parsonsian systemics, that is, the idea of social systems tending to self-maintain order if they are disturbed (in particular see Bailey, 1984, 1994). In Luhmann's terms, unpredictably, the probability of improbabile is ensured, that is, an interaction that is in itself improbable due to double contingency is made predictable and probable through a spontaneous selection and emergent stabilization by social communicative systems.

From this perspective, Luhmann's theory is an *anti-humanistic* conception of the social system. Communication is a *social process*, an operation that ensures the recursive reproduction of social systems. It is not people who communicate: if everything were left to individual, subjective, and unpredictable consciousness, there would be no communication and, consequently, no system. Only social systems reproduce themselves by producing communication through communication. Only social systems reproduce themselves in this way, by exchanges of meaning or emergent expectations stabilized and codified in *symbolically generalized communication media*. The latter are tools that regulate and enable communication and interaction that is otherwise made uncertain and impossible by dual contingencies: *money* for the economic system, *power* for the political system, *truth* for the scientific system, *faith* for religion, *love* for intimate life, *justice* and *law* for the legal system, *values* for ethics, *art* for imaginative and creative artistic life, etc. This means conceiving the autonomy of action subsystems (economy, politics, science, religion, intimacy, law, ethics, art, education, mass media…). And to the extent that it is the social system that communicates and not individuals, the society is the emergent stabilization of a selection among multiple possible meanings, and it is not a contract of a rational and autonomous will of human beings, as in Rousseau's humanist conception or in the Enlightenment.

Here, there are some relevant aspects of Luhmann's theorizing that have to be highlighted.

First, it is the meaning, as elementary unit of the social system, to be complex. Meaning is *redundant* (redundancy means a multiplicity of meaning referring to those symbolic, semantic, codes of structures that are selected and stabilized by the social system itself in order to reduce environmental complexity and to ensure communication and relationships) and *contingent* (selected and stabilized meaning could be otherwise) (Longo, 2010: p. 245). In a reciprocal relationship, it is the meaning that is produced by the micro that represents the possibility of disorder and vital trigger of systemic creative order, the engine of evolutionary process of forms of order and rationality in complementary coevolution of system and environment. Meaning is what environment-individual consciousness produces to disorganize the system, and it is reworked by the social system in the form of meaning as a self-referential reduction of symbolic complexity and existence condition of social systems themselves.

The formation of social systems, which allows human beings to assume consciousness and live, depends on the "richness of references that characterizes meaning" (Luhmann, 1984: p. 362). Therefore, meaning is a whole and a *social product*. From this perspective, and this is what we are interested in highlighting, structures form and give form to the social system by connecting actions. This connection of actions can change cross-sectionally, between social systems at the same time, and longitudinally, within the same social system over time. Social systems recognize, legitimize, and stabilize random actions in meaning expectations, and remove disturbances by ensuring the self-adaptation of systemic structures to changes in the meaning consciousness, so that everything is no longer random (p. 461). Structures, being a selection of limitations, resolve contingency, the momentary duration of meaning. For this reason, the structure concept is not used to indicate a form of stability but its function in the continuum of the relation between lesser connection and greater differentiation of system-environment: safeguarding from contingency and creating order. Therefore, making meaning means making social order. A new action connection among many possibilities is actualized, a new order as soon as the previous actualized order "vanishes, becomes thinner, abandons its actuality due to its intrinsic instability" (p. 154). The intrinsic instability of meaning reveals that the meaning is a product of social emergent evolution/reproduction that generates the difference between psychic and social structures. In fact, the use of meaning pushes toward generalization, toward cultural, objective expectations that are characterized by a changing reproduction of meaning and social system. And since it is the systemic formation of structures that is the solution to contingency, social structure is not a form of stability of meaning given once and for all. Meaning produced by environmental turbulence can disrupt the meaning of systemic structures, a disruption that can even be a catastrophe, a path to entropy. This has been avoided and requires continuous system monitoring.

Second, this meaning function affirms the value of *time* in the construction of social order. The system itself ensures the self-reproduction of essential structures

that guarantee the connection of actions in changing temporal circumstances. For Luhmann, that is, it is a matter of correcting deviations by restoring the *status quo ante*, that is, the structures which have been previously actualized and now contested by micro, or of changing social systems. Social systems, that is, reconcile existent structures with what is selectable and exercise selectively and emergently, unpredictably, this function.

In this regard, according to Luhmann, especially modern contemporary societies, which are closer to differentiation between system and environment, the integration is functional rather than a symbolic integration. Today, the Luhmannian consideration of unpredictable conformity and deviance with respect to expectations depends on the behavioral expectations of social individualism and is a conferral of meaning. Decisions are not a conscious state but a structure of meaning, and there is a social recognition of choice freedom by contemporary social systems. So it is possible a decision among social options in a micro-macro-micro rapport. Contingency is open only before the decision. Since it is possible to find arguments in favor of all possible choices, no definitive choice is made. After a choice, decisions are made. All social systems are guided by a process of complexity reduction. And if something no longer works, Luhmann argues, something else will work better to reduce complexity (p. 514). It is the social system that selects structures of expectations able to connect social actions. The new social system, its new symbolic self-organization, emerges from the stabilization of meaning spontaneously selected.

Third, precisely this constitution of a new, unpredictable, surprising system emerging from a circular communicative system/environment relation, self-organization, and differentiation from the environment where the individual consciousness and its interpretative capacity have been placed, allows Luhmann to avoid the paradoxes of *Parsonsian normativism*. As we said, Parsons attempts to resolve the problem of social order induced by double contingency through the existence of values and role norms as a device for social integration, that is, through an existing social system, macro, that must be explained. Instead, by assuming a higher level of conceptual abstraction, that is, by assuming as constitutive elements of the social system not actors interpreting the situation by their goals and beliefs but communications, Luhmann resolves the order problem through the conception of its social meaning or meaning communication. There is a Luhmann's conceptual shift of social systems to a social emergent reality, micro-macro-micro, in reaction to inputs which come from the identification of psychic consciousness with environment.

Fourth, the constant reference to emergence makes Luhmann's theoretical approach an evidently anti-reductionist approach. Von Foerster's (1960) mechanism for the systemic production of order from noise is what Luhmann extends to the social system. Indeed, noise, which in the social is represented by situations of double contingency, becomes the opportunity for the creation of that order which is the emergence of an actualized meaning for actions. As mentioned, social

order is that emerging stabilization of a spontaneous selection among multiple possible meanings or expectations that would be exposed to uncertainty due to the mechanism of double contingency that makes the outcome of actions uncertain. Thus, the emerging convergence of social interactions through the spontaneous selection from social systems is functional to adapt to environmental complexity, by reducing the uncertainty of interactions themselves and enabling the operations of social systems, that is, communications, as well as those of the consciousness, that is, thoughts. Emergent social systems are far from being merely the mental copy of the behavior's complementarity. And, since social systems include other possible behaviors and are comprehensible only as a reality emerging from the redundancy that characterizes the meaning, the excess of possibilities is a resource that enables the emergence of increasingly rich forms of social order.

At this point, to the extent that the communication is the operation that identifies social systems as systems emerging from double contingency and unexpected synthesis of perspectives of ego and alter, communication no longer leaves space to reductionism in Luhmann. In regard to emergent selective process among possibilities of meaning, the logic of the Spencer-Braun distinction (1969), already imported by Maturana and Varela as a functioning model of the cognitive process, inspires Luhmann's formalist epistemology. A binary selection code (e.g., accepted/rejected, true/false, right/wrong, permitted/unlawful) guides the autopoietic process of meaning determination and the self-creation of the social system.

Fifth, the epistemology of the autopoietic action self-determination radicalizes Luhmann's revision of Agil, marking the abandonment of the *culture* role—that set of meanings resulting from the selective process—as the center and summit of the action system and social order. For Luhmann, culture is the result of the emergence of the micro-macro-micro rapport, shifting along the continuum between self-organization, disintegration, and new self-organization. Therefore, social order has nothing to do with consensus to the extent that social systems can continuously be disorganized by micro. Since there is a continuous emergent change concept, communication does not generate a definitively stable common consciousness, consensus, full sharing, or agreement. Social order is a question of the autonomy of social subsystems, which must follow their own symbolic rationality and logic of operating in order to maintain their specific differentiation. It is an autonomy that declines in a structural (*self-organization*) and operational direction (*autopoiesis*, whereby every social subsystem autonomously produces the communicative elements of which it is constituted, translating, by logic of distinction, the environmental information inputs into its own typical symbolic code, that is, transforming them into communication by its own specific function).

This conception of the social subsystems' autonomy, each one an environment for the other, denies the possibility of a normative conception of social integration, which implies a unity of the social system or a central cultural connection. Indeed, the continuous disintegration of every single subsystem is the condition of the order or self-reproduction of the social system. In this framework we can place

the luhmannian interpretation of AGIL that is simply the "autopoietic mechanism of the social system […] an automatic mode of functioning by social system" (Donati, 2010: p. 151), which differentiates itself functionally to reduce environmental complexity, through performing an indefinite number of functions—well beyond the four Parsonian functional prerequisites—not normatively ordered by a center or vertex. For Luhmann, there is no central part that governs the whole. The social system is symbolically changing and creative. And this is where we must begin, as we will see.

Last but not least, if in Luhmann social relations are "communicative differentiation understood as a form of distinction by contingency" (Donati, 2010: p. 246), and if this is a continually self-reproducing process from which social systems' order derives, the order can continually emerge from the disorder. In fact, the self-organization and autopoietic circuit of social systems continues to reproduce itself, since the relationships and interactions reduce uncertainty by actualized meaning but do not eliminate uncertainty. In other words, the selection is ephemeral in respect to constant threats to the environment and in its constant reference to other possibilities. This continuous emergent, unpredictable change allows us to better understand contemporary modernity, where social order is functional and recognizes symbolic freedom.

Similarly, among theorists of modernity, beyond the diversity in their conception of today's uncertainty -whether it is the extreme culmination of early modernity and our contemporary modernity is ultimately nothing more than the substantial continuity of this culmination, as Giddens says, or whether it is a distinctive and discriminating process of our contemporary modernity, as Bauman, Beck, Castells say, there is a fundamental analytical convergence in conceiving historical time as fractal and no longer linear. The *arrow of time* epistemologically ties the sciences together, both in the structure of their object of knowledge and in the redefinition of the objectives of their scientific adventure. These objectives are oriented towards the discovery of the generative mechanisms underlying emergence, the structure of interconnections, and the general architecture of the systems themselves, rather than the ambition of predicting and building the future, that is, absolute certainties and the foundation of an orderable conception of world conformed to such certainties.

In conclusion, subjectivists have criticized Luhmann's theory for failing to consider the ethical and emancipatory capacity of the meaning. However, this criticism should not be directed at him because Luhmann is interested in the functioning of the social system rather than the content of meaning.

At this point, by using the epistemological language of the Luhmannian complexity, our choice of progressive semantic and communicative-relational change of illness pain meaning is justified. It shows the temporalized complexity of the social system, which can select and stabilize meaning possibilities susceptible to being replaced over time by different meaning possibilities. In the West, the selective actualization of illness pain's meaning code proves to be precarious and un-

stable, demonstrating the redundancy of meaning possibilities that have to be actualized. It is from this perspective that the meaning of Western illness pain is argued.

4. The Illness Pain Codification in Archaic and Classical Greek World

In a state of meaning complexity, close to systemic connection, a distinctive feature of the archaic Greek world is a code that formalizes a lack of justification for illness pain.

In a life that is in the hands of gods, which arbitrarily sends to mortals the good and the bad, pain is a fact that requires no justification, like all facts that make up existence. Indeed, it is inscribed in the arbitrary will of gods, such that one can't escape this random upheaval in one's own life. Existence is made of pain, and this is a *destiny* for everyone, an inevitable but also unpredictable and sudden destiny because one doesn't know who illness and pain will strike, when they will come, how, and how much they will cause suffering. Their indeterminacy in time and intensity is included in the idea that life is tragic, random, and cruel. In the archaic conception, gods arbitrarily assigned pain and disease, and, if disease was considered contagious, like leprosy, it isolated the individual from his community. Therefore, illness and pain highlight the presence in culture of meaning oppositions such as happiness and suffering, fullness of life and naturalness of death, destruction, crisis, without any explanation. Life is a constant struggle against pain (Natoli, 2002). Greek tragedy is an expression of this pessimistic social-cultural vision of life, where everything is at the mercy of the gods' will, and virtue lies in the ability to resist pain. Therefore, pain is also wisdom, awareness of one's own transience and many limitations of life. This is the pain code in archaic Greek culture. And an unpredictable illness pain is a widespread trait even in Western culture, where gods are no longer involved.

Life is pain even when humans and gods are subjected to necessity as an immanent order of the world. Greek culture objectifies the world, which in classical perspective proceeds no longer by arbitrary leaps. The world is a cosmos, that is, it is harmony, order, balance. Now, illness is an imbalance due to individual behavior rather than the gods' will. Then, a therapy can be developed to eradicate the causes of illness and pain. This is the objective meaning system of Hippocrates's world (Zanobio & Armocida, 1997).

Greek Hippocratic thought supports a change in the objective, cultural, and systemic relational meaning of illness pain. This change is innovative. In a culture and a society that is centered on cosmic harmony as balance and order, even health is a balanced entity (*eucrasia*) in the relationship between macrocosm and microcosm. Therefore, Hippocratic theory is an early attempt in the Western world to provide a rational, secular, etiological explanation for health and illness and pain, transcending superstitious, magical, or religious conceptions and basing illness on human body observations:

Illness then becomes a point of mediation between inside and outside of body: an awareness of the physicality of the body that also justifies initiation of medical investigations into hidden depths, invisible and imperceptible cavities of the body itself (Pisani, 2016: p. 17).

Specifically, health was a balance between four fluids or humors that were believed to govern our body (blood, yellow bile, black bile, phlegm)[2], and illness was a disruption of their balance. Balance means proportionality. In Hippocrates's, Plato's, and Galen's perspective, balance leads to health in the extent that the four fluids are proportional to each other and to illness (*dyscrasia*) in the extent that one or more of the humors are imbalanced in excess or in deficiency. Illness is a disproportionate balance of fluids, a disharmony of body and spirit, a reduction of desire, and an elimination of happiness. Hippocrates and then Galen assigned causes of health and illness, of this alteration of fluids, to individual lifestyle and not to divine interventions. This meant legitimizing the possibility of care. It was a matter of investigating causes in order to restore the humoral balance with a

[2]The harmonious *vs* unbalanced mixture of the four fluids or humors in the human body was capable of determining health *vs* disease. Hippocrates (460-377 B.C) elaborates his theory by considering pre-existing concepts, such as those of Anaximenes in the 6th century B.C that were applied by Alcmaeon to human nature in the 5th century B.C, and then perfected by Galen in the 2nd century A.D (129-201 A.D). The Humoral Theory associates each humor—blood, yellow bile, black bile, phlegm—with a quality (hot, cold, dry, moist) and an element (air, fire, earth, water) and establishes that an excess or deficiency of one humor over the others alters their balance and causes disease. Lifestyle and no longer gods is the main cause of the imbalance of the humors. First Galen studies scientifically Humoral Theory through the dissection of animals and the observation of bodies of individuals which had died in a violent way (for example, in battle). Therefore, the suggestion of bloodlettings can be attributed to him in order to restore balance of the four humors that were no longer proporzionate and in harmony with each other. However, Galen does not stop here. Humoral Theory is a theory of the human physical constitution (*complexion*) and at the same time it is a personality theory, a human temperament theory.

Therefore, everything depends on the prevalence of a humor. Thus, blood, who is warm and moist, is linked to air on macrocosmic level, is located in the heart, and is predominant on microcosmic or human level in *sanguine* temperament, distinguished by optimism and exuberance; yellow bile, who is hot and dry, corresponds to fire, is located in the liver as seat of abdominal appetites, and is predominant in *choleric* temperament, associated with irritability, cunning, and pride; black bile, who is cold and dry, corresponds to earth, is located in the spleen, and is prevalent in *melancholic* temperament, who tends to be sad and reflective; phlegm, who is cold and moist, corresponds on macrocosmic level to water, is located in the brain as seat of psychic activities, and its prevalence defines the *phlegmatic* temperament on microcosmic, human, level. This temperament is slow in activity, lazy, dull, and bearer of positive aspects, that is, aspects who are the opposite of irritability: the phlegmatic temperament is calm, patient, dedicated to activities that require concentration and diplomacy, talented, peaceful and ordered. However, it is the *pneuma*—air, breath, spirit—located in the heart that is the *principle of life*. The sanguine person is not only an optimistic and exuberant but also ruddy person; the melancholic is thin, weak, and pale, that is, he has physical characteristics that imply sadness and greed; the choleric is physically dry, as well as characterized by vitality and a tendency to anger; the phlegmatic has a slow metabolism and is characterized by tranquility and reflection. Foods contrasting with the prevailing mood, for example, hot and dry foods counteract the cold and dampness who are prevalent in the phlegmatic, constituted the care. Therefore, Galen separates the primordial elements (fire, air, water, earth) from their intrinsic qualities—hot, dry, cold, and damp—and orders them in a mathematical combinatorial system in which the elements can combine in infinite ways and give rise to infinite characteristics of human nature corresponding to the four temperaments. Before Galen, Hippocrates refers that the 4 number is based on the Pythagorean principle of *tetraktys*. It is the foundation of every natural phenomenon: there are 4 elementary qualities that correspond to 4 seasons, 4 moments of life (childhood, youth, maturity, old age) and of day.

therapy consisting of dietary and environmental measures that were aimed at counteracting imbalanced humors. Therefore, Humoral Theory presents itself as a theory of illness and pain that concerns the individual in his or her entirety. Indeed, the first illness is a sign of a physical-psychological alteration, such that each individual has a composition that differentiates from others and requires a specific therapeutic connection between physical and psychological processes. Hippocratic medicine is a technique that attempts to cure illness, pain, and the limitations of life. In this regard, the role of physicians, the study of causes of illness and illness pain, the *diagnosis* based on case observation, and the *prognosis* through a prescription of intervention methods are elements that have been introduced by Hippocrates. Although there was no certainty of healing, the human body was believed to have a natural vital force capable of aiding human intervention in rebalancing the disharmonies that led to pathologies.

Greek medicine doesn't stop here. Human individuals suffer, but an excess as well as a deficiency of a humor alters the balance even of human temperament. Galen especially considers that the Humoral Theory is the basis of a personality theory or temperament science (see note 2).

The Hippocratic text highlights not only the objective meaning of pain but also its expression. There are clear references to reasons that propose the *composure*, which implies balance and suffering strength virtue, is essential for ancient and Hippocratic Greeks as an objective expression mode of pain meaning. Considering that the Greek importance of the aesthetic care for the body can only be understood within a conception of the corporeality as an expression of personality, to which Greeks were extraordinarily attached, a body that is deformed by illness and pain is such an obstacle between the self and its action that human dignity is compromised. Therefore, since human dignity was based on actions, human ability to conceal one's pain from others is essential for ancient and Hippocratic Greeks as an objective and not a chosen, subjective way for avoiding the manifestation of one's own dissolution. In classical Greek culture, the sufferer must practice composure, that is, a balanced and objective way to safeguard one's own dignity and avoid the pity of others. Objective, cultural, and the reason for the *golden mean* returns. It is a measure that must never be lost, especially in pain and in the distortion it causes.[3]

The Humoral Theory contributes to changing the objective, cultural, and illness pain meaning. Hippocrates does not fix the primary difference between health and illness in the randomness of these events. Both health and illness are always random. Although individuals do not experience being healthy, they experience physical and psychological suffering, which happens at random. The novelty of Humoral Theory lies in providing a rational explanation of health and illness, which are processes generated by individuals and managed by the community. There is

[3]Plato's critique to tragedy lies in its ability to arouse emotions and weaken control over passions, by compromising the moderation, a passions' rational self-control. As the law of form enshrined, Plato supports the idea of balance, which must always be pursued even when pain compromises the *form*, the corporeality as a sign of human personality, self-control, and human dignity (Natoli, 2002).

a decisive cultural change, a first humanism or disenchantment of the world.

As mentioned, the Humoral Theory presents the individual in his or her entirety. Illness is not only a sign of physical-psychological alteration, but illness and pain involve the entire social sphere of individuals, by influencing their place in family, class, community, polis, and social relationships. Since health is closely linked to the ability to actively participate in social and political life, which is founded, consequently, on the well-being of their members and citizens, illness and its pain damage community and family by preventing individuals from carrying out their functions and duties. This explains why the illness meaning code implied the exclusion from public roles and loss of citizenship. And why illness and pain were conceived as a *social threat*, capable of weakening the integrity of family and polis. Also, family relationships change in meaning and function. Family role is multifaceted: in an era dominated by magic-religious beliefs, the family provided both care and support to sufferers. In the ancient Greek world, since illness was an arbitrary divine assignment, treatment was codified as a practice that was entrusted to the intervention of family members, by herbs and esoteric practices, and even psychological pain was entrusted to their care. In classic Hippocratic medicine, illness treatment is entrusted to doctors and their knowledge, and assistance and support are reserved for the family. These effects are based on the income of the social class. A higher class guaranteed greater access to medical care and to the avoidance of family marginalization compared to lower classes (Natoli, 2002). Even today, pain is a multiplier of social inequalities (Cardano, Giarelli, & Vicarelli, 2020).

The Humoral Theory is not a scientifically verified theory. After the 19th, it was abandoned. In contemporary times, the mere name of Hippocrates is enough to evoke the image of rationality underlying the scientific process, the rejection of superstitions, the importance accorded to observation of the human body and social environment, the diagnosis of illnesses, and prognosis. Today, verification is a requirement of contemporary science. Studies on pain highlight the assessment of pain through magnetic resonance imaging, causes of pain, mechanisms of pain, and pharmacology of pain (Dickenson & Besson, 2011). For example, pain studies refer to the use of functional imaging in order to understand pain mechanisms, viewing pain as a complex experience that is associated with increased blood flow in specific brain structures forming a network rather than isolated centers (Shah & Marsden, 2004).

5. The Illness Pain Codification in Christian Tradition

Unlike Greek tradition, Christian tradition justifies suffering. It codifies pain as a just punishment for human guilt that is a free sin against God's laws (Anselmo, 2020). Sin is due to freedom, to desire to be free from His precepts, from His logic that is incomprehensible in the light of a human rationality based on contract, that is, on the logic of *do ut des*. Since freedom often disappoints and exposes us to awareness of having found in freedom nothing of what we desire and to a reflexive sense of guilt, meaning code attributes to illness pain a cause and a function: it is

a product of human freedom, of a free sin, and it has a salvific function because pain is able to gain eternal life. Therefore, Christian hope is founded on Christological alliance in order to eternal life and on the idea of atonement even for others through pain as a means of eternal salvation (in so doing, it resolves the pain problem of those sufferers who have lived and continue to live by following God's precepts)[4]. The difference between Greek archaic and classic culture is evident.

In archaic and classic Greece, eternal salvation and atonement concepts are absent. Greek hope cannot be assimilated to Christian hope. It is a hope of the *here and now*, having a human connotation, that is, the pleasure of living (Natoli, 2002). Instead, the Christian hope is absolute and eternal. It is placed in no arbitrary God will but rather is a guarantee of certainty and trust. Already, this Christian trust tradition has a Jewish origin. In Jewish tradition, trust in God rests on His fidelity to people He himself has chosen and elected, on keeping the promises made to Jews. The idea of alliance as the foundation of the Old Testament's Jewish religiosity, according to which only human infidelity to God's laws is the sin capable of compromising it, translates into the Christian idea of a new alliance where trust in God and God's faithfulness mean that God immediately saves in eternal life all those who repent, their spirit. He forgives our guilt, so that in His forgiveness individuals can hope to be resurrected and to be freed from evil and pain and death. In objective cultural pain, meaning atonement and prayer as an offering for one's own and others' sins represent the action in relationship with God.

The objective meaning of suffering changes compared to the ancient Greek and Jewish world. Illness pain still implies a humanity that suffers physically and psychologically, and individuals who don't recognize their corporeality and performance. However, if pain is lived by patience and faith, in-with-for God, in codification of suffering it redeems, saves from guilt-sin, and is the gateway to new life. In this suffering code, Christ, God and man of sorrows, is emblematic. Although He is supremely just, innocent, without any sin, He does not redeem us from sin; He suffers, dies, and resurrects for our salvation. On the one hand, Christian tradition dissolves pain in God's forgiveness for immediate eternal life, erasing in forgiveness the desperation of guilt and the tragedy of existence because pain is unjustified, even the art is influenced by Christianity, and tragedy is definitively excluded as a poetic-literary type. On the other hand, since in Christianity God is the faithful promise of eternal salvation and source of a new, saving, alliance, a new concept of salvation compared to Judaism is the fundamental core of Christian conception, beginning with the exaltation of the cross in the New Testament. The idea of hope is understood as the possibility of a material and spiritual miracle, conversion, redemption, and resurrection, an endless banquet of a life that is transformed and reaches its end after experiencing poverty, beyond material poverty, humility, love even for one's own enemy, its earthly vocation, and overcoming limits of one's own finitude in Christological Easter.

Quoting Rilke, if death is the other side of life that is not illuminated by us, a

[4]Even the sacrificial pain of the just has a salvific function, otherwise the pain itself is meaningless.

Christian reflection on pain and death allows us to experience them consciously, to accept the inevitability of earthly death, and to give more meaning to life, pain, and death itself.

And today, what is the meaning of pain, and how do contemporary individuals experience illness pain?

6. The Meaning of Illness Pain in Complex Modern Contemporaneity

Even today, pain is not only a biopsychological fact but is due to social determinants. In this sense, it is undemocratic. As socio-economic status (income and education level) increases, life expectancy and overall health status increase. The most disadvantaged classes are more vulnerable to chronic diseases. Often due to disabling working conditions. They show lower adherence to screening and preventive checkups, to fat-free food rules, and a higher rate of forgoing treatment. Lengthening waiting lists in the public sector pushes those with greater resources to turn to private care, increasing the gap. Access to pain therapy varies by gender, age, and social class, generating structural injustices (Cardano, Giarelli, & Vicarelli, 2020). In any case, illness and pain destroy the patient's previous biography and redefine a new existential condition, negotiating his or her own identity within the family and work environment.

Since the experience of suffering is inserted in collective consciousness that attributes to pain an objective meaning, today's world is characterized by a culturally recognized freedom where illness pain is an objective historical modality that models individual possibilities of expressing suffering—*affective tones of suffering* (Natoli, 2002).

Today, illness pain can be recognized as an unexpected social fact. In Western culture, illness pain is solitude —both desired solitude and solitude due to lack of communication —and we again agree with Natoli (2002): destructiveness, because it breaks habitual rhythms of life; and *radicality*, because it involves all sufferers' experiences. It inserts itself into the social experience of sufferers, in their decisions, evaluations, and relationships already established, which come to be altered, distorted. Indeed, the way of relating is modified, even if it is not canceled. Therefore, illness and pain are a reduction of possibilities of life and performances, an *impediment*, a *diminution or loss of self*, a feeling of *transience* and *precariousness*, an *estrangement* from the world, a *reduction of life*, a private experience of limitations as finitude that is not a chosen finitude but a finitude that can suddenly and unpredictably arrive. Illness and pain are an aesthetic unrecognizability by sufferers and by others, and a greater weakness of character due to fear that in pain relational disagreements "come to completion and definitively take over what remains of us" (Natoli, 2002: p. 29). Individually, illness and pain can be accepted, suffered, patiently endured, or mentally rejected, refuted, experienced with the attitude of screaming or with the silence, sadness, anguish, hope, tears, fear, resignation, and even irony or sarcasm about one's own pain (Natoli, 2002:

p. 15). As Natoli analyzes, suffering and silent solitude, which reduce the space of the world to sufferers and push them to withdraw from the world towards death, raise questions about the value of life and the justice of pain. These are individual experiences that imply the cultural objectivity of free choice.

The meaning of these last words is clear. Reactions to pain are not only individual reactions. In micro-macro-micro, they are due to an individual choice—the micro—and emergently selected, stabilized, recognized by the social system—the macro—that reorients the action until the next change micro, etc. Today, this social recognition has emergently given rise to a free society, with unexpected and unpredictable relational effects of freedom (the case of intimate relationships is evident). Thus, pain is an individual matter because it is an unequivocal component of a cultural society. In this regard, illness pain contributes to the formation of individual identity.

In terms of complex systems, sociological identity is constituted by a network of relationships that form individual identity, and it is a structure that has a core that is subjected to unpredictable changes, including a state of crisis and dissolution. In other words, total identity, the representation of the self, *emerges* from individuation and individualization processes, and is never fully explainable. This is even more true in the case of illness pain, when it becomes the dominant relationship in constituting subjective identity (Natoli, 2002: p. 18). It is a relationship with oneself, in terms of limitations of one's own performance, and with others, in terms of a communicative separation and isolation that arises from an inability to communicate one's own pain. Actually, this asymmetry between those who suffer and those who do not suffer means that sufferers experience a distancing of themselves from others and of others from themselves.

If illness pain implies social masks that a culture offers and is a social, cultural fact, the specificity of illness pain in our contemporary world is something new, something unexpected. Indeed, it is an effect of technological progress that makes illness and illness pain a medicalization matter. Starting with the process of secularization.

The process of secularization can be understood as a micro-macro-micro process. It rejects the refusal of the world that is inherent in Christianity and weakens the community. Collective interaction is reduced, for example, attendance at Mass, and social control is reduced. Today, responsibility is individual; there is a personal attribution of guilt and indifference to divine precepts and eternal salvation. In contemporary modernity, individuals killed God and institutionalized religion, and at most transformed religion into religiosity, in a free choice to believe. Illness pain, then, changes meaning once again. It is no longer culturally a form of atonement, but an entity that diminishes life and has to be erased from it. This change in meaning and relationality has contributed to the development of technology applied to illness.

Today, illness and pain are secularized and medicalized (Freidson, 2007; Williams & Gabe, 2015; Illich & Zola, 2015). By investigating the so-called work of

pain care and management (self-care), critical sociology, with theorists such as Illich and Freidson, defines the medicalization of pain as the process by which society delegates the management and definition of suffering exclusively to medical knowledge, often reducing this experience, linked to social and emotional factors, to a simple symptom to be eliminated with a drug. In other words, here pain has the primary basis in medical authority. Critical sociology rejects this process and accepts the secularization process.

The gods are not an unjustified cause of illness and pain, and God has nothing to do with them. The unpredictability and expectedness of illness and illness pain are their widespread objective characteristic and a personal conviction. They are random, have no justification, are not chosen, and God does not send them on the basis of sin. On the one hand, there is a minority that continues to believe in God, and that illness pain is a just punishment. Atonement and eternal salvation concepts, as well as the primary function of pain, remain valid. And there are also those who rebel against God and lose their faith. On the other hand, a culturally recognized and accepted *presentification* is generally widespread. People want to be happy *here and now*, and this presentification is recognized by systemic affirmation of the value. In the secularization process, illness and pain depend on the development of medicine. It doesn't eliminate pain—technology cannot do this—but changes the cultural meaning by medicalizing suffering. Therefore, today, pain is not a hope of eternal salvation but a technological hope of controlling illness and pain, occupying what was previously the place of theologies. In conclusion, in today's complex society, an objectified cultural conception of freedom allows sufferers to live in this way their illness pain and their relationship with God.

7. Conclusion

Illness pain is timeless. There is no historical time in which suffering is absent. But pain is not only a biological fact but also a socio-cultural one. Indeed, over time, the social meaning of illness pain, that is, its codification, including its expression, has changed. The progressive semantic and communicative-relational change is specific to the social system, which is characterized by temporalized complexity, by emergent changeability of meaning and action in relation to a continuous process of interdependence between disintegration and reproduction. Therefore, illness pain is part of social symbolic complexity. As already mentoned, this is a new awareness of the social system as a symbolically complex system, that is, a system capable of producing a multiplicity of meaning possibilities of its structures—values, norms, behavioral expectations—and spontaneously selecting and stabilizing the one that best is adapted to be actualized for action in response to environmental meaning inputs, where the environment is constituted by individual consciousness.

Therefore, saying that pain is part of social symbolic complexity means that it is situated within collective (Botturi, 2009). This is due to social frameworks of meaning that change in culture and time, civilization, and history with respect to

the codification of suffering. And this means that the actual social system society has given rise to the medicalization of illness, pain meaning, and to possibilities of choice, even in this area. Indeed, now even multiple *variations in psychic or affective tone*, *moods of character or motions of soul*, *common attitudes* of those who experience suffering and subjectively interpret their physical and psychological pain, and choose a social mask that best adapts to them are part of that cultural freedom recognized by the cultural-social system society.

Now, we argued about the meaning of illness pain in Greek and Christian tradition. For Greeks, there is no life without pain, for Jews, pain is unnatural, and for Christians, we can hope for eternal salvation immediately after death. And we know what contemporary society has changed in the meaning of illness pain compared to classical Greek and Christian tradition, subjecting illness pain to the development of technology and to the medicalization process. Indeed, faced with illness and physical pain that shatters identity and becomes psychological pain as well, one either throws oneself into the arms of God, of His will, recognizes in the suffering of Christ, and gives in this way meaning and justification to one's own pain. Either one cultivates atheism and trusts only in technology. Or one believes in eternal happiness and gives to pain an expiatory and salvific function. Or one believes only in earthly happiness, and pain is codified as having a mortifying meaning for identity and life. Today, in interdependence between connection and differentiation, between disorganization and new self-organization, it is this latter meaning that has largely prevailed. Since culturally, objectively, the world is no longer rejected, pain is expunged from cultural cognition. But with what social risks? What negative consequences accompany such a lack of rejection of the world in a secularized culture, that is, in a society where the happiness of the *here and now* motivates the development of medical technology?

The question is not unreasonable. Sociologically, the risks are there. My main hypothesis is that contemporary technologization and medicalization codification of suffering also have an increasing sufferers' loneliness.

Today, what was previously impossible in a society appearing to be oriented toward connection—life expectations aren't chosen, and care is always embedded within family relationships—seems to be happening. Since contemporary modern freedom of choice seems to be ethical, as Durkheim showed in his *Le Suicide*, a perverse effect (see also for analysis on this topic, Condorelli, 2016), because individualism progresses, it weakens social bonds; actually, this weakening of social bonds seems to apply even in illness and pain. If freedom means that illness pain is unpredictably, unexpectedly excluded from our cultural understanding, it is no longer surprising that we refuse to engage with anything that obstructs our freedom. Indeed, today, in which individualism is distorted into extreme and selfish forms, there is a cultural sense of freedom that is the cult of youthfulness, health, and fitness; illness, pain, and caring for others are limitations that arise from a relational perspective of suffering, and they are objectively obstacles. In this context, illness and physical and psychological pain proceed toward a continuous

erasure of finitude, limitations, human precariousness, and fragility, leaving us without tools when medical technology cannot help. And this means that freedom and the cultural lack of world rejection have influenced relationships. They seem to have increased loneliness and isolation risks, emptying relationships of meaning. Even loneliness, desired or found in isolation, is part of pain. Relationships are influenced by this current shift in suffering meaning. It is not surprising that individuals have difficulty asking for help and communicating their pain, locked in a pain they don't want and often don't know how to express otherwise, and communicate modesty and that illness pain is no longer primarily a family relationship, experienced within the family and accepted by all, both those who care and those who are cared for. Now, freedom of choice means hospitalization as a culturally foreseen possibility and concretely offered in services that are provided for this purpose by social systems. Removing illness from family care and subjecting it to an external organization to discover its causes and, if possible, to develop appropriate therapies is what we have defined here as the medicalization of illness. Even illness pain has been secularized and medicalized. If development of technology does not guarantee health, medicalized objectivity of illness pain is the primary point of reference to contemporary man and the primary source of help. However, according to me, this medicalized objectivity of illness pain increases the sufferers' loneliness, weakening, in hospitalization, the family relationship within which illness pain was previously fully experienced.

In this context, it is freedom, objectively recognized by the social system as a value, that unpredictably implies a socialization to illness pain like socialization to old age, that is, it is substantially absent. For me, the surprise of freedom, in this as well as in all social relationships, has erased Kantian responsibility and has made normal an actual relational fragility as well as no acceptance of pain.

In conclusion, there is a legitimate doubt, a sociologically provocative question: perhaps today we are more selfish, or have we always been, and relational freedom simply blows the lid off? Is it today, as Natoli says, that those who don't suffer aren't simply unwilling to help, but fear being left behind in the rhythm of life and have no time to stop? These last questions raise questions of nature and culture. Sociologically, it has been possible to answer them by emphasizing the symbolic complexity of the social system. As we said, the meaning change is placed within a new conception of the social system, which allows us to conceive illness pain from a systemic and complex relational perspective.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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