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Approaches to The “Model-Function” Relationship in Modern Linguistic Theories

Abstract: The analysis of human communication began, in the mid half of the last century through a mechanicistic approach inspired by the mathematical theory of information transmission and it has evolved into an interactionist analysis centered on the constructive value of face-to-face communication. If in the first phase, the relationship “function of language” / “communicative model” had in the case of expression the dyad “representation” / “transmission”, the interactionist approach replaces it by the dyad “creativity” / “recursion”, this latest relationship being the expression of a systemic vision on daily communication.

Key words: linguistic theories, functions of language, communicative model

The variety of approaches to human language across time is primarily proof of the natural complexity of this protean epistemic space. Within this tendency of diversity of views also fall the attempts to build a general model of structuring and developing fluent conversational activity and – as a complementary approach – of giving a more eloquent idea of speech functionality. Solutions to these problems were no less numerous, each taking tale quale or, alternatively, the critical past performance, then trying to offer a new interpretation, depending on the type of argumentative strategy that each author decided to take in building his own views on the matter.

To circumscribe the framework of the present approach more precisely, we find it necessary to emphasize from the very beginning the meanings of the concept of function. The term in question is of a fairly recent dating, its specialized use being recorded in the nineteenth century. It was first used in the mathematical sciences, then in biology, and through a terminology transfer made on the spur of the analogy between the functioning of the body and that of the human society (analogy that characterized the beginnings of

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sociology as a science in its own right), arrived in the field of social sciences, where it managed to give birth to functionalism, a representative current of research in that area. In this respect, one of the first definitions of a social work function (a definition that finds immediate application in the frame of our approach if we consider language as a purely human aptitude that is materialized in everyday social interactions, i.e. that part due to which human beings could be defined as animal politicum et sociale – Toma d’Aquino) is the one amended by sociologist Alfred R. Radcliffe-Brown, founder of structuralist functionalism in sociology: "The function of any activity is given by the role it fulfills within social life seen in a unitary way, and consequently by its contribution to maintaining structural continuity" (Encyclopaedia Universalis 9: 610).

Here, we specify two relationships that will become essential in the subsequent human social research, namely the one between function and role, on the one hand, and between function and structure, on the other hand. Both relationships have gone through developments in various investigatory fields, the relationship between function and structure, for example, being very productive in the systematization of the field research conducted by sociologists, and also much criticized for the determinism implied by the proponents of the concept in which society is regarded as a mechanism subject to change and perpetual conflict (G. Simmel, Marx, etc.).

Also at the level of definition, but this time referring directly to language functions, it is important to note the one proposed by linguist Peter Mathews:

The function of language: any type of situation that can be realized within a language or making use of it. Thus, a message can transmit information, can play the distress of the speaker, can be an attempt to force someone to do something, etc. (Mathews 139).

This last definition summarises in a concise way the two approaches to the functions that human language can fulfill: an internal one, exclusively linguistic, which develops “inside language” and an external, pragmatic one, which emerges through “using it”. The two ways of looking at the functioning and, consequently, the structure of the language managed, over time, to take turns in the mainstream field of linguistic ideas, each trying to separate in its own style what is inherent to linguistic activity from what is exterior, arbitrary to it.

The linear-teleological model of the functioning of language

In modern times, the linguists from the Prague Structuralist School were those who were to give a privileged place to the functional dimension of language. Taking from Saussure the notion of language as system, they focus on functional aspects that the everyday use of the linguistic system involves. They conceive language as a system of systems that become interdependent in the process of communication. Language facts must be considered functionally and teleologically, being relevant to linguistic analysis only in terms of the function they perform. Assuming the concept of “function” from the Polish linguist I. A. Baudoin of Courtenay, the Prague linguists consider that in the process of converting the
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extra linguistic reality at the level of the linguistic system, language manifests two main functions: the communication function and the poetic function, the importance of each being given by the message content to be performed (Graur, Wald 198).

A supporter of the Prague Circle, the German psychologist Karl Bühler was one of the first scholars who tried to eliminate the tension created between the two functional concepts above (internal functions and external functions), originally considered irreconcilable, by overlapping the Saussurian dichotomy on language and speech over this one. Bühler achieved the balance between all these initial oppositions through the distinction he made within language between the act ("Sprechakt") and action ("Sprechhandlung"): the linguistic action is the one that gives language the character of instrument, while the linguistic act is related to the activity of signifying, the latter one constituting the foundation of language (Ducrot, Schaeffer 502).

Pointing out that the main task of linguistics is to study the structure of the language act, the author in question is very dispose of any reference to the external component of verbal activity in a manner that would be defining for a good period time in twentieth-century linguistics. Following this concept, Bühler represents the linguistic sign as a tripartite form, as a result of the structural elements involved in its realization: locutor, recipient and content of the statement. According to these boundaries, the following functions of the linguistic sign can be distinguished, each corresponding to one of three factors: a) the expressive function ("Ausdruck"), in which the linguistic sign is considered a symptom of the speaker, b) the appeal function ("Appell"), where the linguistic sign is considered a signal for the recipient; c) the representation function ("Darstellung"), in which the linguistic sign is interpreted as a symbol in relation to the designated reality.

However, the best-known schematization of the functions of the linguistic sign remains to this date is that of Roman Jakobson (Jakobson 209-248). This would become a landmark in defining (through attempts at criticizing it, or at refining its structure) the majority of the subsequent efforts to analyze the language from a functional perspective. Developing Bühler’s scheme, which he takes to be a model of the linguistic act and not of the linguistic sign, as it was with his predecessor, Jakobson increased the number of functions to six, considering that, besides those identified by Bühler, three more ought to be taken into account: the phatic function, the metalinguistic function and the poetic function.

A very important element for the appropriate understanding of the functioning of the linguistic sign in the real communicative act is Jakobson’s specification that there is an essential interdependence between all these functions, which would be specific to a message not being “a monopoly of either function, but the difference of hierarchy between them. The verbal structure of a message depends above all on the predominant function” (Jakobson 1963: 214). Although normally the referential function is the predominant one,

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3 In a first phase of the theory, Bühler used for Ausdruck ("expression") the term Kundgabe ("manifestation") and for Appell he used the word Auslösung ("what is provoked with the listener"), the original terms that Coșeriu considers as “something better” than those in the final form (Coșeriu 146).

4 It should be noted that Jakobson highlights a seventh function – the magic (or delightful) function, which “can be understood as a transformation of a “third person”, absent or inanimate, into a recipient of a conative message” (Jakobson 216). The seventh function was not, however, preserved by the author in the final scheme.
we should not overlook for one moment the fact that all the other functions participate simultaneously in the actualization of the message in a more or less visible, or a more or less defining way.

The general embracing of Jakobson’s scheme by linguistic research community could be possible especially due to the fact that the atmosphere of the times itself was ready for the reception and the consensus about such a model; what the Russian theorist had done was simply to transfer into linguistic terms an already existing scheme. This was the scheme developed by the American researchers Claude Shannon and Warren Weaver, who developed – in the work entitled *The Mathematical theory of communication* (1949) – the famous mathematical theory of information transmission in telecommunications systems, based on the T (ransmitter) – C (channel) – R (receiver).

Being a purely mathematical application, the main purpose of such a model is to see under what conditions a certain amount of information can reach the recipient through a channel under conditions of maximum security. Optimization of transmission channels (reducing disturbances to the maximum, especially noise) and highlighting the role *redundancy* concepts (that which is predictable or conventional in a message) and *entropy* (the maximum unpredictability of a message) play in structuring a message are the key elements around which the respective theory was constructed.

If the appearance of the linear model of production and transmission of information presented above was made possible by applying a theoretical corpus specific for the universe of sciences over the analysis and communicative process, we should make clear that such an approach has also worked in the frame of other research directions. We mention here American behaviorism in the first half of the twentieth century, for which the behavior of individuals within society is seen as a sum of mechanical reactions to the stimuli that environment exerts on them, as well as the much more recent communication model developed in the functionalist theories of mass communication. These, being concerned with efficient ways of transmitting information to the masses, are primarily intended to obtain an optimal effect on the public. Harold Lasswell’s model is one that expresses very well this focus of preoccupation for the theorists in the field. Designed around the same time as Shannon and Weaver’s model (1948), it reiterates the basic structure present in the scheme of the two, adding though a further element centered on the persuasive side of the verbal message:

<table>
<thead>
<tr>
<th>sender</th>
<th>message</th>
<th>code</th>
<th>receiver</th>
<th>result</th>
</tr>
</thead>
<tbody>
<tr>
<td>(who)</td>
<td>(says what)</td>
<td>(in which channel)</td>
<td>(to whom)</td>
<td>(how effectively)</td>
</tr>
</tbody>
</table>

The similarity to the mathematical model of information transmission is quite obvious. This, in fact, prompted claims that this scheme “is the verbal version of the original model
of Shannon and Weaver” (Fiske 51). As in that case, the problem of meaning formation remains an external one, with emphasis on the effect obtained through the transmission of specific information to the masses.

By comparison, it can be argued that if in the case of language functions, the perspective that worked was relational, we have, this time, at the level of human communication an approach emphasizing the role language can play in the discursive activity, the image presented here being this time purely internal, too, focused on an instrumentalist and unilaterally directed conception of the act of transmitting the information. Thus, whether it is the analysis of language at the level of the functions it performs, or the schematized informational route generated by running a specific conversational act, we see that at the level of the first phase of theorization, we witness an unequivocal conception of the two activities, unable to take the context as a defining factor in linguistic analysis.

We must say that the models presented so far are not the only ones that have been produced in order to represent the development of a communication line. The linear scheme went through many other approaches, each bringing other elements in question or, conversely, trying to simplify the data of the equation. However, their common denominator is a certain conception of communication, which is seen as the transmission of messages between two poles, based on a code and on a pre-set channel, eventually aiming at achieving a particular purpose. Thanks to these aspects, these theories have been grouped under the generic term of “school-process” (Fiske 16) – a formulation suggestive for the manner of schematizing the informational line. The conceptual basis of this “school” is structured on four main principles (Lohisse 27-29):

a) the model is linear: the direction of information transmission has one way – from subject A to subject B –, important being only the maintainance of message integrity;

b) the model is sequential: by the constitutive linearity of the message we can distinguish well concrete moments of its performance: emission, transmission, reception, effect, etc., which can be analyzed in order of their occurrence;

c) the model is atomist: as a direct result of the sequence of communication, this principle lies in the discreet nature of the units making the message: phonemes, words, sentences, phrases, etc.

d) the model is referential: to make it possible to transmit certain ideas, they must be “materialized” in verbal terms, to be represented by language, which is the system of signs. The relationship established between objects and words is conventional, the latter being just artifacts that can be studied independently of the protagonists involved in an act of communication.

Neglecting the concrete conditions of producing a daily act of communication, the schemes mentioned so far have shown their limits rather quickly, leaving place, as we shall see, for some models able to circumscribe more precisely the complexity of human communication.
The circular-interactionist model of language functioning

The whole issue of the functions which a linguistic sign can perform presented so far can be seen as a debate that took into account the purely linguistic perspective, its internal functioning. If for the early period of linguistics as a subject in its own right (early nineteenth century), this approach to the linguistic act had a well-determined justification; today, when interdisciplinarity (in its final version – transdisciplinarity) managed to radically change the way each of us conceive external reality, remaining stuck in this perspective would be an inadequacy of epistemological nature of scientific approach, with adverse consequences for current linguistics.

Overcoming Jakobson’s model that became too narrow in the meantime due to the imposition of new concepts in the vocabulary of contemporary linguistics was to be achieved by developing research currents incorporating, as major premises, the re-insertion of the speaking subject in linguistic analysis and re-interpreting contextuality as a dimension intrinsic to any conversational activity. The subjective dimension of language is becoming increasingly important in the new theorizing, with the realization that, in fact, its existence is justified only through and for the individual speaker.

In linguistics, the first guidelines that were to endorse this new approach have been those that, by their very nature, were focused on the analysis of the external factors of the linguistic act and their means to influence and structure everyday verbal interactions. A first impulse in this respect came from the Anglo-Saxon analytical philosophy of language, as it was developed in the frame of Oxford School. J.L. Austin – one of the leading representatives of this school – introduced for the first time (in a series of William James lectures, held at Harvard in 1955) the notion of speech act, a fundamental concept in his theory, which refuted the widespread hypothesis that the description of reality is the main function of language. The theory of speech acts – a name that shall henceforth refer to this new vision of language functioning – aims mainly at combating the descriptivist illusion granting language the exclusive function of representing reality through affirmative statements whose main quality was to always be either false or true (vericonditional conception). Rising against this somewhat static acceptance of language, Austin promotes a much more “operational” position (Moeschler, Auchlin 135) on the everyday language activity, the language function being no longer, according to his own theory, that of achieving a description of reality in terms of true/false, but of acting on it, allowing the person performing a language act to carry out an action, in fact, by producing the action itself. Respecting this perspective, the statements can no longer be regarded as either false, or true. What should be observed from now on in the framework of linguistic analysis are the effects that these statements may have on the listener.

Austin first makes a distinction between performative statements and constative statements. If the latter do not change at all the status quo they evoke, performative statements transform reality to which they relate. They are usually accompanied by verbs that have this explicit and pragmatic dimension called performative verbs5. In a later stage

5 In fact, this distinction is much older in European culture. Thus, Aristotle is the first to make a separation in the language, saying that it, in its capacity logos semantikós, is structured in three parts: logos apophantikós (‘affirming or denying something about things’), logos pragmatikós and...
of development of his theory, Austin grants even to constative statements a certain
performative value, because even a simple statement of fact can influence the listener. This
disjunction in the constative acts leads Austin to the formulation of a tripartite scheme of
the linguistic act. Thus, according to the English theorist, when we articulate a sentence, the
following three types of acts are being produced:

a) a locutionary act, consisting of the physical emission of the respective sentence;

b) an illocutionary act, which refers to the immediate effect, followed by the locutor
on the recipient;

c) a perlocutionary act, accounting for the time effects of the sentence, through
hidden meanings and unprepared for the moment.

Note that all these distinct types of acts are performed simultaneously, Austin’s
conception concerning the actualization of the language functions being opposite to the
hierarchical one of Jakobson.

Another argument against Jakobson’s scheme is the one that comes from the French
school of enunciation linguistics, which, having enunciation theory developed by Émile
Benveniste as a starting point, conceives communication as a complex process marked out
by a lot of linguistic, paralinguistic and nonlinguistic parameters, permanently modeling the
universe of discourse. Catherine Kerbrat-Orecchioni is currently one of the best known
representatives of this type of analysis. Like most of her predecessors, the French author
starts from a critical analysis of Jakobson’s theory, where she finds some vulnerabilities.
First, in terms of code, this is not at all, in her view, homogeneous. The communicative
skills of the partners involved in a dialogue are in most cases divergent, so the author
argues that “we should admit that in general, communication is not based on a code, but on
two idiolects” (Kerbrat-Orecchioni 16). In addition, the universe of discourse is much more
complex than Jakobson conceived it. He included, in addition to linguistic competence,
paralinguistic skills, cultural competence (or “encyclopaedic competences”, as the author
also calls them) and ideological competence (all seen as interpretation systems of the
referential universe), all of them leading to the conception of communication as a
performative “multichannel” activity. Taking into account all these constitutive factors in a
conversational exchange, the communication scheme should look – according to Kerbrat-
Orecchioni – as follows (Kerbrat-Orecchioni 1995: 19):

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*lógos poietikós* (Coşeriu 13-16). Also in St. Augustine’s work we find this pragmatic dimension of
discourse. This is conceptually linked to *vis verbi* which he theorizes in his early work *De
dialectica*: “*Vis verbi* ‘power (of meaning) of words’ [expression shown in (Wald 141) through the
‘power of influence of the words’] is something that helps us realize the value of the word, this
value is measured by the impression of one who hears the word” (Augustine 81).
Recognizing that the proposed model neglects some properties of verbal communication, such as reflexivity (the sender of the message is simultaneously its first recipient) and symmetry (any receiver is a virtual transmitter), the author asserts that the present scheme has, at least, the merit to have drawn the attention on the numerous and complex aspects presupposed by any speech activity and to have suggested several reflection topics that enunciation linguistics should consider for the future:

- to investigate how various skills are articulated with each other, how this complex filter, which is the discourse universe, works in the encoding and decoding processes, how the referential dimension of a verbal message is performed in a given situation, and, finally, try to develop those models of production and interpretation that make possible the conversion of language in speech (Kerbrat-Orecchioni 28).

It is therefore obvious that the inclusion of the social-contextual aspect into language function analysis has become a constant of linguistics in the last period. If in the frame of the instrumental paradigm the relational dimension that structured language functions was present exclusively on the linguistic system level, in the frame of the systemic-interactionist
paradigm, the relationships that give rise to such functions include the psycho-social context for communication activities. This openness to the social aspect of language practiced at the level of the linguistic analysis is present in a much broader range of contemporary research, a direction where communication sciences also fall that emerged, in turn, out of “immanentist ghetto” approaches of structuralist type.

If on the language functions level, the change of perspective came mainly from inclusion into the analysis of its social and contextual dimension, on communication level this “socialization” of the object of study is doubled by a heuristic effervescence due to the combination of theorizing efforts owing to a variety of points of view. The Systemic perspective, which is an extension of the information theory of Shannon and Weaver, brings into the study of communication principles such concepts as totality, complexity, contextuality, interaction, etc. From information theory they go now to cybernetics, in its study quality of mutual links established between elements of a system. The concept of informational feedback is now a key concept in communication modeling, recursion being an expression of the process of self-organization in the language.

Converted at communication level, systemic approach led to a theory of organization through communication, coupled with the formulation of a constructivist view of communication (Lohisse 123-129). The first one, known as the cybernetics (Edgar Morin), aims – on verbal interaction as human communication foundation – to reveal the organization of message communication, by denying the sovereignty of the command developed in mechanistic key and empowering the creativity subsumed in any verbal activity. The constructivist theory of communication, due to philosopher Heinz von Foerster, goes beyond these precepts, in the direction of communication as a hermeneutic interpretation (i.e. a constructive activity) of the relationship between oneself and another one, while the observer is not located outside the universe under observation, but is a constituent part thereof. Through the items entered in field analysis, all these lines of research opened by systemic approaches will ultimately lead to a much higher understanding of human communication.

Another transposition of the systemic principles of psychosocial science investigatory field is achieved with the advent of interactionist theories applied to communication. We will focus furhter on communication theory developed in the Palo Alto School, also known as the “Invisible College”. This school proposes to overcome the teleological conception of communication by developing an interactionist, organicist model, also called “orchestral model”. Researchers included in this project carry out their investigations mainly at family level – a framework considered par excellence as an open system, where the operation of constituent elements is subject to a principle of wholeness, holistic by definition.

The main conclusion the School members come to is inevitably influenced by organicist type parameters assumed in the frame of the research undertaken. It argues that no matter where we get placed in the flow of social activity, the only certainty we might have is that of communication, an idea which, formulated in maximal terms, practically affirms the omnipresence of communication:

Let’s say first that in general behavior has a fundamental property, which, therefore, often escapes attention: the behavior has not opposite. In other words, there is no “non-behavior” or, to express things more simply, we cannot not have a behavior. However, if we assume that within an interaction, any behavior has a message value, i.e. it is communication, then
whether we want it or not, we cannot not communicate. Activity or inactivity, words or silence, everything has message value. (Watzlawick, Beavin, Jackson 45)

Under these circumstances, any human activity is placed within the framework of communication, making it a sort of “envelope” (Lucien Sfez) of all forms of both: individual and social manifestation.

Theories presented so far have built a concept of communication much more open to contextual factors, moving away from the instrumentalist model of message transmission. This attitude has a much more general character at the level of the current paradigm, the systemic-type approach increasingly gaining more followers from very diverse fields of inquiry. We briefly mention here the research in the rather generous field of communication anthropology and of pragmatics of language, both animated by the same goal of expanding the theoretical framework of human communication research, taking into account social parameters primarily. Many lines of research, such as symbolic interactionism (Erving Goffman), ethnomethodology (Garfinkel Harold) or ethnography of communication (Dell Hymes) – all subsumed to an anthropological-type of approach – or theories of enunciation (Emile Benveniste), speech acts theory (John Austin, John Searle) and conversation analysis (H. Paul Grice, Antoine Culioli, Catherine Kerbrat-Orecchioni) – that will be entered into the field of linguistic pragmatics as types of analysis – have been lately taking into account, the need to reconsider the theoretical foundations of structuralist and linguistic origin by including of the intersubjective essential dimension of the communicative process in the conceptual panoply of this science. Re-directing many works of research in linguistics towards the daily discursive universe structure analysis reveals the researchers’ awareness of the scientific deadlock the structuralist approach reached, the solution being detected in refocusing the investigatory interest on the current conversational activity sphere, as a place where human language can be analyzed in terms specific to its performance.

Unlike the teleological “process school”, the interactionist perspective was classified as part of the “semiotic school” of language analysis, in the frame of which the meaning is assigned a fundamental contextual dimension in defining it. Communication is no longer a mere transmission of information from a transmitter to a receiver; it has now become a constant activity of production and exchange of meanings in a social framework, whose presence cannot be overlooked by new epistemological conditions. This activity of a profound participatory nature is structured on the basis of organicist-interactionist principles, worked out by Jean Lohisse (Lohisse 101-102):

a) the model is circular and complex: linear-type transmission of information now gives way to communication complexity, considered as ubiquitous; placing the individual speaker within communication that makes the circular route better express the autogenerating of its producing conditions;

b) the model is interactive: if the analysis of the mechanistic model is based on a sequential approach, in which the recipient of a message was attributed a generally passive attitude, in systemic paradigm participants to the communicational process are placed in substantially equivalent positions, they equally contributing to the development of that process under good conditions;
c) the model is based on the concepts of \textit{totality} and \textit{context}: a direct consequence of systemic analysis approach, holistic perspective on communication seeks to overcome the atomistic analysis, in the frame of which parties prevailed over the system. The meaning cannot ignore the context in which it is built any longer, it regaining its rightful place in the frame of the analysis of language functions;

d) the model is \textit{relational}: far from being a representational approach, in which language was conceived as a mirror of reality, in this case the relationship that becomes dominant is the relationship between things, signs and their users. The reference so often invoked in logical studies of human language is exceeded through adopting a pragmatic, constructivist type of analysis.

All these principles make a research field out of the systemic model of communication with precise heuristic meanings today. Transforming communication into a recent subject of analysis is a rather provocative turn in linguistics. There were voices that considered this opening as suicidal for this science, both because of the universality and excessive degree of abstraction of the newly incorporated subject of study, and of the absence of a generalized theory of this level (Lohisse 182-184). However, the epistemological opening that the assumed multidisciplinary analysis of such a concept carries out cannot but produce positive effects in the research field of social and human sciences. Moreover, an interdisciplinary approach is justified by the very complexity of the subject of study, namely human language.

Continuing the comparative approach at the level of the function / model ratio that is present in the investigational field of human communication, it is clear that in the frame of the linear paradigm the main function of language was the \textit{representation} of a given \textit{a priori} reality of the human intellect, communication representing a subsequent process of unidirectional transmission of that representation between two participants in a discursive act. The systemic paradigm refutes this distorting perspective, giving language a very important place in the social dimension of human genesis itself. This is no longer seen as a mere vehicle through which to transmit a certain amount of information. It has now, thanks to its constituent alterity, a key role in ensuring social cohesion, as well as (and more importantly) in \textit{generating} it. \textit{Recursion} of discursive activity as a fundamental dimension of language functioning is matched by the \textit{creative} side of intersubjectivity assumed as implicit to any act of language, communication being placed in this case into structured space on action-retroactive creative dynamics grounding. If the relationship \textit{function of language / communication model} had for expression in the frame of the teleological paradigm the dyadic \textit{representation / transmission}, the systemic communication paradigm proposes as a solution in this case (in compliance with a certain consistency of vision on the dynamics of the parallel between the two terms of the respective terminology pair) the dyadic \textit{creativity / recursion}. We can say that this \textit{creative-constructivist} perspective on language functionality is currently a very promising research direction in the analysis of its complex structure, much more appropriate to the subject (human communication) than teleological models expressed out of the theory of mathematical information transmission. That applies so much more today, as we witness a “return of constructivism” (Sintonen) in the argumentative field of social sciences, a current whose main “claim” is to convince us to see “reality as a social project” (Searle). The validity of this assertion is based primarily
on a linguistic argument, namely, the creative potential of human language, potential underlying the entire social structure of human communities.

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