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"The obligation of a promise" as a problem of double contingency: David Hume's ground-breaking investigation into basic forms of social coordination

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Abstract

David Hume's work on "the obligation of promises" is the precursor of many ideas in contemporary sociology. Hume's analysis provides insight into problems of basic social coordination, which in modern theories are characterized as a problem of double contingency. His work has also paved the way for theories of social mechanisms such as trust and of operational principles such as self-reference. In his writings about the inner workings of promises, Hume even lays the foundation for ideas concerning structure building via communication and the emergence of social systems. In his time, this kind of thinking must have been bold—arguing, for example, against religious beliefs or social contracts as constituting binding motives. In our time, Hume's work is astonishing in how nuanced he already exposed social problems that have to be solved continuously, from moment-to-moment, in every social situation anew. Hume's thinking paves the way for later system thinking, especially regarding the ways we can think about the "beginning" of social systems.

KEYWORDS

communication, coordination, evolution, social mechanisms, social systems

1 INTRODUCTION

The intention of this article is to outline the "modernity" of David Hume's resourceful thinking with regard to theoretical concepts for analysing basic social problems. Although Hume is one of the most influential thinkers in philosophy, his role as a precursor of recent theoretical contributions in sociology should not be understated. I call Hume's analyses modern because—far from any normativity—he addresses social problems of coordination, of absorbing uncertainty, of coping with complexity, and of dealing with risks and uncertainty. Hume

furthermore discusses evolutionary solutions in their function. Hume's elaborations refer to empirical problems, although the latter are never definitively resolved. In his elaborations, he analyses temporary resolution of situations of indeterminacy. Such situations always have to be solved anew, and their theoretical core is to be sought in the analysis of their temporal dimension. This is what Hume's work on the obligation of promises has in common with concepts emphasizing the problem of double contingency (Parsons, Luhmann), as we will see later. Hume's case is the "promise," which he thoroughly analyses as a human invention based on a convention in his

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Syst Res Behav Sci. 2022;1-10. wileyonlinelibrary.com/journal/sres famous work "A Treatise of Human Nature: Being an Attempt to Introduce the Experimental Method of Reasoning Into Moral Subjects" (Vol. III: Of Morals), first published in 1740.²

In modern language, a promise can be referred to as a social construct intended to solve problems of coordination and uncertainty in interactions and, in the end, to turn unlikely communication—through commitment to a future performance—into likely communication (Gambetta, 2008, p. 217). Referring to Niklas Luhmann's view of social systems as the solution to the problem of double contingency, I wish to bolster Hume's assertions by taking a closer look at the mechanisms of a promise. Luhmann claims that the problem of double contingency is simultaneously its very solution, due to the (re-) production of systems. System creation leads to expectations remaining stable despite the need for selection, coping with uncertainty, and risk (Luhmann, 1995, p. 121).

My purpose in examining the mechanisms of a promise is to describe the functionalist method applied by Hume and his contribution to sociological knowledge as it was developed centuries later. Today, we can acknowledge that the concept of a promise served as a spring-board for other famous concepts, such as rational choice and game theory, social institutions, and trust—all of which will be addressed briefly in this paper. The main achievement of Hume's work, however, is that it makes it possible to present the emergent quality of communication from the point of view of double contingency.

This discussion starts with a sketch of Hume's argumentation on the origins of a promise (Section 2). This is followed by a deeper analysis of Hume's thinking, linking it to the problem of double contingency laid out by Luhmann in his seminal work "Social Systems" (Section 3). This leads us to the point where we need to clarify the circumstances of the participants' relationship in Hume's example as defined by a convention and the quality of the convention itself, namely, the nontransparency of the situation (Section 4). We than assume a convention to be an object of variation and selection in social evolution (Section 5). The final section attempts to grasp the importance of Hume's ground-breaking thinking (Section 6).

2 | A PROMISE

The first premise of Hume's concept is that there is a relationship between social beings who perceive each other as people with degrees of freedom in their actions. These social beings—actors, agents, or persons—can be labelled using the classical terms of *ego*, the social self, and *alter*

ego, the other self (Mead, 2009, p. 204). At least two separate perspectives are indicated by this distinction. Ego recognizes herself/himself (self-reference) in contrast to alter ego (other-reference) and must assume alter does the same. The second premise is that someone who makes a promise is subject to an obligation to other persons. Ego raises expectations of performing an action by expressing a promise to alter. We can find several elements of a promise in these initial elaborations: first, a motive that binds someone to an obligation; second, an expression to solidify the promise, like the utterance of certain words or the use of gestures or symbols; and third, another quality, a social mechanism needs to be in effect that allows everyone involved to assume that the promised actions are likely to happen. Needed is a mechanism that absorbs uncertainty. In fact, all elements are consequential for both perspectives, as the receiver has to compute what was promised, what the alleged motive behind the promise might be, and how to respond to that offer. Therefore, all elements are related to the selection of a possible understanding and to the subsequent action of the recipient of a promise. All three elements refer to the basic selections of communication as social action: information, utterance, and understanding (Luhmann, 1995, p. 139).

While it is necessary for *ego to* form a motive to perform what has been promised, Hume denies that the obligation to fulfil a promise is grounded in a psychological quality. Right at the beginning of the famous section in his Treatise, Hume recognizes that the mind cannot rely solely on the self-reference of the will, of sentiments, or of desires to fulfil an obligation. He cannot find a corresponding motive in the "faculties of the soul" and, therefore, concludes that a promise, specifically an uttered one, must be investigated as a social fact. Such facts are rooted in the nascent relations between two humans, relations that are supported by human *conventions* (Hume, 1975, p. 516).

A convention, in Hume's thinking, crystallizes in the common-sense interests, responsibilities, and obligations that all members of society express to one another. Like a convention, a promise is a human invention based on the needs of society for social coordination. Hume's approach starts by elaborating on social problems and comparing conventions with other fundamental societal issues (abuse of power, inefficiency in production, vulnerability) and the respective achievements that offer solutions: checks and balances in political systems ("conjunction of force"), the division of labour, and solidarity ("mutual succor") (Hume, 1975, p. 485). A promise is, as Hume concludes, a supplement to the law of nature, that is, the "rules of justice" concerning stable normative expectations. The convention creates a new motive, offering the

prospect of mutual advantage (Hume, 1975, p. 490). This is feasible if words and symbols with a certain meaning are institutionalized in society, allowing all participants to have common experiences.

The utterance of the words is the constitutive part of the promise. By saying "I promise ..." ego takes the risk of never being trusted again if she or he fails the test of "fidelity" (Hume, 1975, p. 522).3 In that case, ego will lose credibility in fulfilling commitments, and this means that the person will lose the opportunity to gain certain advantages from cooperating with others. This obviously cannot be in the interest of rationally calculating, selfinterested humans since the loss of credibility is not just an inconvenience, as Fried (1981, p. 15) assumes. On the contrary, never being trusted again implies the risk of being excluded from any cooperation, which in close communities is a real burden. Failing to honour a promise, therefore, increases the risk of a loss of social capital (Coleman, 1988, p. 103) or of acquiring an unfavourable reputation (Lahno, 1995, p. 253). Self-interest creates expectations towards oneself, that is, the obligation to perform what is promised because of the anticipation of the expectation of others.

However, rationality alone does not explain why someone believes in a promise. *Ego* states that *ego* will return *alter ego's* services at a future point in time: "After I have served him, and he is in possession of the advantage arising from my action, he is induced to perform his part, as foreseeing the consequences of his refusal" (Hume, 1975, p. 521). *Alter ego*, the receiver of the promise, has neither knowledge about future events nor about *ego's* possible behaviour and, because the preceding action is foregone, has no influence on future actions. The solution for this temporal indeterminism is often found in social contexts.

Theorists of rational choice have analysed the problem of collaborative action with the help of the prisoner's dilemma—the choice between cooperation and defection. As the uncertainty about the behaviour of alter ego leads to ego's likely choice of defection (and vice versa), the optimal solution for both to cooperate is individually inaccessible (Elster, 1979, p. 20).4 However, as Elster also argues, individuals relate their actions to their expectation of the expectation of others (expectation expectations). Coordinated action is possible when conventions, norms, or ideas become socially forceful: "For norms to be social, they must be shared by other people and partly sustained by their approval and disapproval. They are also sustained by the feelings of embarrassment, anxiety, guilt, and shame that a person suffers at the prospect of violating them" (Elster, 1994, p. 24).

To believe in a promise and perform a *risky advance* action, alter ego must build some form of confidence in

ego's fulfilment of the duty. Only if alter ego is confident of receiving his share of the profits will he enter into cooperation without getting his profit immediately and without having a direct influence on further developments. Cooperative actions lead to a rational outcome in the sense of a mutual advantage. Nevertheless, the belief in a promise is not based on rational calculation. It is a decision under uncertainty because alter ego has no valid information about the consequences of the own decision, only experience. If alter were to calculate all conceivable alternatives and consequences, which is the normative premise of rational choice theory (Elster, 1994, p. 23), he or she could be forced not to decide or to refuse cooperation because of the sudden-and overwhelmingawareness of all the hazards. Trust, on the other hand, selectively eliminates some possibilities from the perspective of the decision maker. Certain risks and uncertainties that could not be completely clarified, but which should not interfere with the actions, are neutralized (Möllering, 2006, p. 356).⁵

It is now possible to identify the different elements of Hume's idea of social coordination by means of a promise: self-interest is the motive to perform a promised action, certain symbols and words institutionalize the relationship between *ego* and *alter ego*, and trust is the necessary condition for a promise to function.

3 | (RE)FRAMING THE PROBLEM AS DOUBLE CONTINGENCY

Hume's approach raises some further questions. If a promise is based on a human convention, what is a convention based on? To answer this question, the situation must be analysed by exposing its *temporal dimension*. Hume writes in his prosaic style:

Your corn is ripe today; mine will be so tomorrow. 'Tis profitable for us both, that I should labour with you today, and that you should aid me tomorrow. I have no kindness for you, and know you have as little for me. I will not, therefore, take any pains upon your account; and should I labour with you upon my own account, in expectation of a return, I know I should be disappointed, and that I should in vain depend upon your gratitude. Here then I leave you to labour alone: You treat me in the same manner. The seasons change; and both of us lose our harvests for want of mutual confidence and security. (Hume, 1975, p. 522)

Each of the two parties in this example have the problem of initiating an action. *Alter ego's* behaviour depends on *ego's*. *Alter* is simultaneously an acting agent (subject) and the object of orientation because *ego's* behaviour depends on *alter's* as well. In the same way, *ego* is both an acting agent and the object of orientation. *Alter* could help *ego*—this is possible but not inevitable. *Alter's* choice depends on *ego* and his choice regarding whether to help *alter*. *Ego* faces the same dilemma. Both parties experience contingency: they each might help the other and share the labour, but both are uncertain about the return. Both parties have the choice to help each other or not. Instead of cooperating to their mutual advantage, a lack of certainty about the other's preferences might lead them to go their own ways.

This problem is characterized by the experience of double contingency. *Ego* experiences contingency in *alter's* choice and, vice versa, *alter* experiences contingency in *ego's*. In this problem we see the self-referential circle that impedes the initiation of a sequence of social actions. *Ego* and *alter* are both caught in a paradoxical situation; it is indeterminate. The interaction collapses in this particular narrative ("for want of mutual confidence") until the next attempt. What is the solution to this problem? How is it possible to unfold this paradox of self-referential indeterminacy?

In the social dimension, Hume discusses very basic motives for turning to other people. This includes not only physical affection, but also material satisfaction. Immediately, questions arise concerning cooperation for the provision of services and goods as well as the mutual recognition of property. A convention may solve the problem of social cooperation and increases the likelihood of establishing an arrangement to achieve a mutual advantage. The prospect of an advantage or disadvantage ("the inconveniences of transgressions") is the force that creates an obligation to which members of society bind themselves (Hume, 1975, p. 490). This argument assumes that humans are inherently aware of self-interests and strive to satisfy their needs, and for this they depend on other people. However, the needs of persons are part of their personality. A personality develops in social relationships, in communicating with other people, in developing expectations of the expectations of others:

The individual [...] is continually reacting back against this society. Every adjustment involves some sort of change in the community to which the individual adjusts himself. (Mead, 2009, p. 202)

Aside from some basic needs required for survival in the "state of nature," further preferences arose in the interaction with others, for example, in socializing and communication. Because of the problem of double contingency, we therefore still have the dilemma as to how social relationships, especially cooperation, are stimulated. We cannot presume that the individuals involved possess a predisposition for meeting the requirements to solve the problem of double contingency because the competence to meet these requirements emerges from communication itself.

This also applies to another problematic aspect. To use Hume's words:

They are the conventions of men, which create a new motive, when experience has taught us that human affairs would be conducted much more for mutual advantage. (Hume, 1975, p. 522)

The necessary condition for experience is social interaction. Individuals test their expectations in social relationships, and these expectations will be either disappointed or met. In the former case, the expectations may be adjusted to a lower level; in the latter, new, further-reaching demands may be formulated and tested again. The result is a learning experience. This means in this specific case we cannot assume that experience precedes social action. In order to continue the experimental exercise, we must first present a solution to the problem of how to initiate any kind of social interaction.

Hume's analyses regarding this question are primarily based on action-theoretical premises. He takes insinuations of meaning from the observed actions and attributes them to the agents (*ego* and *alter*). Luhmann turns this position around and asks about the possibilities for *alter* to experience *ego*, that is, to understand *ego's* offer of action (cooperation). The recipient of such an offer has to relate what is communicated to his or her own experience in the past (structure) and then indicate with his or her own linguistic means whether he or she accepts or rejects the offer. Here, the problem of double contingency is reformulated in terms of communication theory (Luhmann, 1995, p. 108).

For example, a simple gesture at the first meeting of the two farmers can be decisive for subsequent events. A sharp look from *ego* will be interpreted by *alter* as rude and provoke antipathy in him. As a result, *alter's* possibilities for reacting are more limited, that is, are now more predetermined, than in the initial situation. This is a result of *alter's* experience without having had any access to further evidence of *ego's* real intentions. *Alter* might therefore respond impolitely, which in turn would be interpreted by *ego* in a certain way and so on. "In light of this beginning, every subsequent step is an action with a

contingency-reducing, determining effect – be it positive or negative" (Luhmann, 1995, p. 105). After receiving the promise from ego, alter needs to further define the situation by conducting further trials. Yet, there is no reciprocity or complementarity of perspectives between those involved to patch together what is different, as Vanderstraeten (2002, p. 85) puts it. As every beginning has the effect of reducing contingency, only continuous communication allows for further limitations of what is possible and carving out a structure. With a more positive drift, alter might enhance the chances of the opportune offer by responding with a friendly countenance, a smile, or kind words of her/his own. That might be enough for both to continue. The continuation is, therefore, dependent on the selections made, rather than inaccessible states of mind.

4 | THE TWO FARMERS AND THE NONTRANSPARENCY OF BLACK BOXES

Continuing with the example of the two farmers in Hume's discussion, we ask how much both parties need to know about each other in order to enter into the arrangement. Each of them knows that the other is a farmer who grows corn that is ripe for harvest. In addition, neither of them finds the other sympathetic; they distrust each other. Both largely depend on their selective judgments about the other's personality and intentions. The experience of alter ego is limited, and the personality of ego is not entirely accessible to alter, and vice versa. Therefore, it is questionable whether both will continue the interaction: "I will not, therefore, take any pains upon your account," might be reasoned by both parties. The whole situation is based on expectations, that is, assumptions about the motives and intentions of the other. Social situations are made viable solely by assumptions and the attribution of reasons to explain (or anticipate) behaviour:

The folk concept of intentionality describes intentional action as generated by the agent's intention, which is itself based on the agent's reasons. So the major explanatory link to be established for intentional behaviours is that between the agent's reasons and the intention to act, and that link is expressed in reason explanations. (Malle, 1999, p. 35)

Social interactions establish themselves despite the nontransparency of the participants' real states of consciousness. We assume that a promise is the attempt to shape the relationship between autonomous individuals. The brief and unsuccessful start of the relationship in Hume's example is a result of sharp selections because the two farmers reduce their perspectives to a small sample of indicators, most of which stem from the situation. They do not have to evaluate the other person in his entirety to refuse cooperation. The emerging interaction itself reduces complexity and is therefore an emergent quality that is—in terms of its modus operandi—independent of the complex operations of the consciousness of *ego* and *alter*. As Mead argued, it is also the agent himself or herself who does not have "complete" insight into themselves: "It is that 'I' which we may be said to be continually trying to realize, and to realize through the actual conduct itself" (Mead, 2009, p. 203).

However, since the action cannot be evaluated and reflected upon in terms of its real consequences, that is, the reactions of the others to this action, because that is only possible after the completion of the act, the self always acts with incomplete assurance. Self-assurance, or self-confidence, is now a variable of the experience of uncertainty and the risk awareness of a person in a given situation. What must be explained is how interactions take place despite the nontransparency of self-reference (ego) and other-reference (alter ego). The situation depends on ego's and alter's existence and presence, but is not reducible to their states of mind. This form of interaction can therefore be framed as a social system that temporarily establishes limits to what will happen in the following moments.

To refer to the term "system" with regard to our example of the two farmers seems a peculiar choice. Nonetheless, even in the works of Thomas Hobbes (2007 [1651], Chapter XXII) we find ideas about systems as entities defined by and constituted for a specific purpose: "By systems, I understand any number of men joined in one interest or one business." Social systems come into being when both partners experience double contingency and when the uncertainties of this situation for both agents and for every action that occurs have structural implications (Luhmann, 1995, p. 108). In the temporal dimension, we can see the structural effect of the initial action (the "first step") since it transforms perfect contingency into limited contingency, unstructured uncertainty into structured uncertainty (Gardner, 1962, p. 339). Whatever happens, situations of great uncertainty compel ego and alter to make decisions in order to continue the interaction. The possible responses will be limited, the next operations following the first and preparing the next ones. Sequences of operations (selections) become social structures.

Both parties must necessarily develop certain expectations, presumptions, or ideas about the other in order to start an interaction. Alter knows that ego is a farmer and that he may have an interest in cooperating for a more successful harvest. However, it is neither necessary nor possible for alter ego to calculate ego's entire personality. In general terms, we can draw on the classic idea of the farmers as two black boxes who meet and try to reach an agreement for their mutual benefit. Both parties determine their behaviour by complex self-referential operations. The "self" distinguishes itself from its environment, which includes the interaction itself. Whatever becomes visible (observable) in the actions taking place—words, gestures, and other symbols—is a necessary reduction of complexity. This applies to both parties. Yet for all the efforts of the two participants, the black boxes remain nontransparent (Lewis, 1969, p. 27). They are selfdetermined and simultaneously not determined by their environment. In the terminology of Heinz von Foerster, the black boxes can be characterized as nontrivial machines: analytically indeterminable, unpredictable (von Foerster, 1972). Trials to determine the action of the parties may be successful and provide experience, but this does not lead to certainty about the outcome of a stimulus, for example, any kind of proposition. Alter ego will process such an irritation on the basis of his own cognitive structure, abilities, knowledge, history, and experience. Consequently, the response—the output—is undetermined; it is contingent.

However, we have to take a step back and ask: how much do these black boxes need to know about each other for a relationship to emerge from this situation? It is not much, as our example shows. *Ego* alleges that *alter ego* alleges *ego* would not help him, that he has bad intentions and no sense of duty.

I have no kindness for you, and you have as little for me. I will not, therefore, take any pains upon my own account, in expectations of a return, I know I should be disappointed, and that I should in vain depend upon your gratitude. (Hume, 1975, p. 520)

It is not necessary for there to be any actual evidence of antipathy in the opponent's temper. Through their mere allegations, they produce reality: "Here then I leave you to labour alone: You treat me in the same manner" (Hume, 1975, p. 521).

On the basis of these reciprocal allegations, a reality is created that amounts to a social order. In this case, they go their own way; they do not cooperate. Both farmers observe the other's input and output from their own perspective and learn by means of their own self-referential operations, which however remain non-transparent and noncalculable for the observer. Attempts

to exert influence cause uncertain and unpredictable feedback as a basis for new learning. In this way, social order can emerge. This social order is determined by the complexity of the two black boxes, but does not depend on transparency and calculation of this complex quality (Luhmann, 1995, p. 110).

Social organization emerges from the formation of a system, whose actions are its constituent elements. As mentioned above, this signifies a limitation and stabilization of sequences of actions. We also argue that the selfreferential operations of ego and alter remain noncalculable and nontransparent for both parties. It follows that alter cannot control the uncertainty regarding ego's behaviour. Then what is limited and what kind of uncertainty is reduced when the development of a social system starts? When a social system emerges, the uncertainty concerning alter's behaviour is reduced, and simultaneously the possibilities for alter to conceal his behaviour are further limited. At one point, someone has to deliver on his or her promise. Further constraints, the exclusion of alternatives, and reduction in uncertainty are the conditions for the continuous reproduction of actions within the boundaries of the system. The process of the formation of a social system stabilizes the expectations on which behaviour is based and thus supports the creation of an emergent reality of its (Luhmann, 1995, p. 110f.; Parsons, 1991, p. 23f.).

Hume describes, at one point, that one farmer expects to be disappointed by the other when it comes to returning the favour. This is one direction in which communication might proceed, but because it is quite short-lived and the interaction between the two then collapses, the social system ceases to exist. Another direction is that cooperation emerges: a social system with structured uncertainty along a human convention like a promise. In this case, both farmers are confident of receiving a favour from the other in return. This enables both farmers to affirm their own behaviour, to fulfil the promise, and to do their part of the cooperation. Yet, how does this start and how is it stabilized?

5 | VARIATION AND SELECTION

We started with the problem of double contingency. Now we want to show how the emergence of the problem enforces its solution. The structure of the problem is described in a circular manner; the determination of one element depends on the other one: *I will do what you want if you do what I want*. The structure is unstable, and it will collapse if nothing else happens. However, if something happens, then every action constitutes a selection, and every selection is a limitation. This becomes clear in

situations lacking structure and exhibiting great uncertainty: One example is the "easy" flirt with an attractive person because the first contact determines what happens next. Anything is possible; nevertheless, the actual event has the effect of limiting further action. A first offer of meaning (a smile) means selection (a smile is something different from a rude look) and thus limitation, because the receiver is now limited in processing and reacting to this offer. Another example is the initiation of criminal activity, where it can be very costly to approach the wrong person to collude with. Criminals must develop sensitivity to signals in order to show real criminal potential and to start interacting at all (Gambetta, 2009, p. 9).

Although there are many conceivable reactions, the number of possibilities in social realities is not infinite. The situation of pure double contingency does not exist in the reality of our society, nor in our example of Hume's promise because the situation is preconfigured by social differentiation (trait of farming), the interaction of persons who speak the same language and know each other (acknowledging the other as a professional and therefore a realistic support), and also—according to Hume—the improbability of cooperation culminating in distrust. Analysis of this situation, however, enables us to construct a model, an ideal type, maybe as a kind of "state of nature," and to ask how such a complex order can emerge under the presupposition of double contingency. If all those involved behave contingently and everyone knows this about themselves and calculates accordingly, then it is-at first glance-unlikely that actions will come about. In this situation it is difficult to find a point of reference in the behaviour of others or, in other words, to make meaning accessible in order to connect to others or to initiate actions on their own. Commitment presupposes the (possible) commitment of others.

It is precisely this improbability that simultaneously leads to the normality of social order. Under the presupposition of double contingency, every (small) commitment will be valuable to others as information. However, this commitment might come about as:

- a rational calculation of costs and benefits (we know that Hume tends towards this solution),
- · mistakes, misunderstandings, or false calculations,
- · spontaneous gestures,
- · or pure chance.

Any of these variables can be the cause of an initial action, while everything else is a question of further selection—by others. Someone has to pick up on the initial action.

Rational calculation is quite narrow in its possibilities. It only allows for a limited number of choices and is based on the accumulation of information, and rational choice according to this information, and the preferences of the one choosing. First, we have already ruled out the possibility of knowing (in the sense of certainty) the other person's future behaviour. Second, a choice based on information and preferences means a choice based on something that already exists and is known. In social evolution, the convention of a promise has evolved into a suitable means for conducting any kind of business—long before risk calculation (Knight, 1921) and contracts (Fried, 1981).

Any attempt to rationally calculate the outcome of a social arrangement based on a promise starts with the threefold selection of information, utterance, and understanding. The last selection—understanding—also includes "misunderstanding." Even the attempt to obtain validation: "Do we have an understanding?" does not lift the curtain of double contingency for full transparency. As Fried (1981, p. 3) emphasizes, *every* understanding serves as an initiation, such as "preliminary negotiations, words mistakenly understood as promises, schemes of cooperation," all of which may lead to disappointment if relied on, and then remain unfulfilled.

There must be more scope for variation and for something new to explain the very beginning and the development of human conventions. It is therefore not very plausible that a convention, like a promise, is developed by rational calculation. Chance, in contrast, provides a broader range of variation. Here, evolution comes into play. Human conventions are subject to evolution, development, and destruction of social order on an emergent level. They are different from other forms of operations (such as life and thoughts), have their own quality, and cannot be reduced to the minds or personality of those involved in social interactions. Here, Hume himself exposes how *expectations of the expectations* of others are crucial—gained over time and gradually generalized:

It arises gradually, and acquires force by a slow progression, and by our repeated experience of the inconveniences of transgressing it. On the contrary, this experience assures us still more, that the sense of interest has become common to all our fellows, and gives us a confidence of the future regularity of their conduct. (Hume, 1975, p. 490)⁷

A promise is presumably a product of chance (certainly a product of variation and evolution) which has succeeded in certain situations, has satisfied the expectations of human beings (in the form of a faster and richer

harvest), and has been considered worthy of being tried again in the future.

If we refer to three dimensions of meaning—the factual, temporal, and social—we suggest different aspects of successful—in terms of continuance—communication. First, temporal aspects are essential. A quick contribution to a proposal might be more advantageous than a slow one for achieving a continuation of an interaction. If someone is able to muster a meaningful response right away, then the likelihood for the continuance of the interaction increases. Therefore, factional aspects also play a role in sustaining interaction. The selection of topics will determine progress, as it is decisive for whether someone is able to make a meaningful, knowledgeable, and credible contribution to such an exchange. This in turn provides an advantage in terms of speed because if someone can reactivate knowledge, then she or he is more inclined to contribute without hesitation. Finally, the social aspect of considering how a meaningful proposition might be received by others proves crucial, as communication depends on understanding different perspectives of cognition related to the fundamental difference between agreement and disagreement ("yes" or "no," continuance or not).

A human convention like a promise combines many basic abilities to continue communication and establishes various social relationships, even if these lead to disappointment:

- A promise solves the problem of double contingency in the temporal dimension. Soon after the promise is made (the utterance: "I promise"), someone (the recipient) is enabled to follow up on this new state of reality: a distinguishable mark in an otherwise reference-free situation (like a "blank canvas"—only noise, no signal).
- 2. A promise generalizes social relationships in a particular case and situation (to help when help was given) to all kinds of affairs burdened by uncertainty (from paying back a debt to fulfilling a wish of someone dear). Because the invention of a promise has demonstrated that it can lead to satisfaction in many situations, the prospect of mutual benefit in any form desired (less work, greater wealth, pleasure, influence, reduced punishment, etc.) provides a motivation to act
- 3. A promise also provides opportunities for individuals with different perspectives, values, and inclinations to participate. For example, making a promise does not depend on moral behaviour since even criminals promise to help, for example, fulfil deeds which cannot be deemed "good." As a social exchange, that is, an interaction between actors actually present, a

promise is functionally independent of the psychic structure of the participants as long as those involved realize that a promise raises expectations.

Although, as Hume himself realized, the number of people involved must be limited for a promise to be effective, a promise is a powerful, that is, functional, convention in social life, such as in marriage, trade and professional life, friendships, even politics, and much more.

6 | CONCLUDING REMARKS

Hume's ground-breaking work can be seen as a conceptual precursor to modern approaches such as social systems theory. His philosophical reflections serve as an inspiration for analyses for which Hume himself did not yet have the conceptual tools, which were only elaborated much later in a cybernetically informed sociology. This provides some returns in terms of the history of ideas. Hume's elaborations on a promise can be used to demonstrate the emergence of communication from the point of view of double contingency. In contrast to Hume's approach, the problem is then conceived from the point of view of the improbability of self- and otherdeterminations that are not preceded by any commonly shared assumptions of rationality or morality. The problem is solved in communication and only through communication. Luhmann later discussed this with the term "autopoiesis" (Luhmann, 1995).

Rationality assumptions or moral concepts can be used by participants in communication as a shortcut for information, but only at their own risk. Any discussion of whether utility or value provide orientation for all participants destroys their function of relieving or shortening the information burden. The problem of double contingency has to be overcome again and again, for all participants in social relations. Furthermore, in the case of a promise, we can understand the temporality of system formation, which is expressed in the necessity for the participants to commit themselves in the present without being able to draw certainties from the past and without being able to know the consequences that will materialize in the future. The past serves at best as an indication, and the future only appears as a risk. Uncertainty remains and must be reduced, and a communicative artefact such as a promise can help.

Although Luhmann does not refer to Hume as offering inspiration,⁸ Hume's analysis of a promise highlights the analytical force of a concept such as double contingency. In a factual dimension, it is the cycle of mutual indeterminacy that impedes the emergence of the system,

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that is, the initiation and sustainment of interaction. However, it is precisely this indeterminacy that leads to the emergence of social systems. The situation of double contingency is highly sensitive to chance. People in this situation find value in any kind of event. Every happenstance becomes valuable for the autogenesis of a structure and helps, in the following, to further limit the contingency of the situation. This offers a broad range of possible variations that are subject to selection. In all likelihood, the problem resolves itself and feeds into a process that conditions the operations of the emerging system. Here one action has a narrowing effect on the next, as this very act was itself limited by the previous one, so that a sequence of actions develops. This system is the result of selections and a reduction in complexity (contingency) and is not reducible to the quality of the participants. If this new quality is stable over a long period of time and proves successful in different situations (generalization) and according to different opinions, then we may consider it a convention, developed in the evolutionary history of social order. Hume's analysis has opened up new avenues of thinking which he could not possibly have anticipated, but which we have come to be familiar with.

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ENDNOTES

- ¹ See, for example, in Garrett (2015) about the philosophy of mind (Bricke, 1980), morality (Bricke, 1996), or knowledge (MacNabb, 1966).
- ² The edition used for this paper: Hume (1975).
- ³ "Fidelity" emphasizes the social embeddedness of the concept of a promise. Only if someone assumes that their actions are observed by others, and this very possibility of being observed shapes their own expectation, then consideration of the expectation of others generates motivation to act accordingly (Elster, 1994, p. 24).
- ⁴ The prisoner's dilemma concept has been investigated thoroughly in ever more differentiated forms (see, e.g., Ostrom, 2005). It has also been criticized for its artificial, low complexity premises. It is only in the interaction of the observers that the information is generated that is used as a basis for these decisions, but which for this reason (no interaction among the prisoners) is not available (Esposito, 2010, p. 24).
- ⁵ A promise serves as a possible manifestation of trust: "The device that gives trust its sharpest, most palpable form is promise" (Fried, 1981, p. 8). In order for interactions to take place, it is necessary to trust. Trust extends a person's ability to act. Simultaneously, the opposite is always present: distrust. A turnaround to distrust and vice versa is always possible. A slight sign of an abuse of trust brings about its demise. This is known to all partners in a

cooperation based on trust and increases the stability of the arrangement. Building trust takes time. At the beginning, very little risk is acceptable. In the case of success, more risk can be taken subsequently. The emergence of trust is divided into sequences. If everyone depends on trust, it is easier for individuals to find support for their own trust in the trust of others: I trust you if you trust me. Here we see the circular character of social systems, as will be elaborated later. Trust is presupposed and builds on itself. It emerges from social relationships and gains the strength to reproduce itself, taking on even more risk. Trust makes it possible for one to make a decision, without determining the decisions of the other and without knowing about the positive or negative consequences of one's own behaviour. This is exactly what describes the problem of double contingency: selfcommitment before others commit themselves to something. Therefore, trust is a universal social fact.

- ⁶ Early attempts in Italy to use probability to create insurance are attributed to the sea trade in the 14th century (Conze, 2004, p. 848). Here we find the peculiar (con)fusion of the concept of probability with the concept of "utility" (Lindley, 2000, p. 315).
- ⁷ This idea aims at a macrotheoretical argument, which I owe to Hans-Peter Schütt. Hume wants to show above all that it is not plausible to attribute the origin of society to a contract (Hobbes). The actual *explanandum* of a theory of society is to show how conventions come about "without the interposition of a promise" (Hume, 1975, p. 490).
- ⁸ There is only one reference to be found, as far as I can see, in a footnote of the "Risk A Sociological Theory" (Luhmann, 2005, p. 70).

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How to cite this article: Büscher, C. (2022). "The obligation of a promise" as a problem of double contingency: David Hume's ground-breaking investigation into basic forms of social coordination. *Systems Research and Behavioral Science*, 1–10. https://doi.org/10.1002/sres.2825