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Document Version
Final published version

Publication date:
2001

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WP 12/2001

December 2001

The undecidability of decision

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Introduction

This article addresses the phenomenon of decision. I want to examine the possibilities of defining the question of decision within a communication-theoretical systems theory. In this context communication theory is defined in opposition to theory of action. The aim is to view decisions as communication rather than action and therefore also to free theory of action from any behavioural theory including the reduction of decisions to an underlying agent-born intentionality of either rational or symbolic character. The communication-theoretical recasting of the question of decision will take as its starting point the German sociologist Niklas Luhmann and his theory about social systems of communication. Moreover, I will draw on writers like Jacques Derrida, George Spencer-Brown, and Heinz von Foerster.

More than fifty years have past since H.A. Simon opened up new territory to the discussion of organisational theory by an incessant questioning of the notion of the rational decision maker. Very little has changed since then but, undoubtedly, the opening of that question has created an immense dynamism in organisational theory.

The discussion of the 1950s was highly theoretically experimental and extended to many non-economical disciplines. For example, behaviourism and cybernetics were included and their theoretical potential examined. It seems that particularly cybernetics, including Shannon's communication theory, have obtained an important position, especially in the way that the majority of the post-war discussion and re-modelling of decision theory can be seen as gradual rejections of the conditions of communication theory.

Somewhat simplified, Shannons Communication theory of 1940 (reprinted in Shannon & Weaver 1963: 34) can be illustrated in this way:

Sender ————————————————▶ Receiver

   Channel

In decision theory the sender is a decision maker who sends a decision that come to hold implications through the reception of it (implementation). Subsequently, the organisation becomes a system of communication that picks up and distributes information. One example of such a cybernetic figure of the first order in organisational theory can be found in "A Behavioural Theory of the Firm" from 1963 by Richard Cyert and James March in which an organisation is seen as "an information-processing and decision-rendering system". The distinguishing questions in Cyert and March thus become: "How organisations secure information, how that information is communicated through the organisation, how authoritative decisions are reached, and finally, how such decisions are implemented in the organisations" (Cyert & March 1963:20)

In an article from 1997 James March sums up the development within descriptive decision theory in four notions of decision-making: 1) the notion that decisions result from consistency-governed action, 2) the notion that decisions are governed by a logic of identity exercised through a system of organisational structures, regulations, roles, and habits 3) the notion of decisions as products of clashes of different moments in the lives of different agents, and 4) the notion of decision-making as context in which the individual can develop and price his interpretation of and his place in existence (March 1997).

Without in any way pretending to provide an adequate interpretation, the four notions *can* be read as increasingly radicalised modifications and questionings of Shannon's model. The first two notions particularly question the conditions of the sender. They address the conditions of the coding and sending of a decision including the limitations of calculation. The third notion dissolves the condition of sender and receiver being connected by a distinctive channel. Up until this point the condition has been to view the hierarchy as the communication channel of the organisation. Now, the hierarchy as communication channel is questioned which means that some decisions are sent but never received and receptions that have never been sent. We receive a flow of communications that cross and connect unpredictably. The channel becomes network. The fourth notion questions the reception of the decision. A decision no longer automatically reaches the recipient with the meaning and intention with which it was sent. The recipient becomes independent in relation to the representation of the sent message. It is not simply a question of a misunderstanding on the part of the recipient but of the sent decision as grounds for a range of actions different from the intentions suggested by the sender of the decision. The decision allows for the recipient's interpretation of the world, including the decision-maker, confirmation and denial of relations of trust, socialisation of new agents, enjoyment of status of influence – in general, for the creation of meaning. Consequently, the recipient controls the communication through interpretation of the sent message.

In this development, however, which has been extremely productive and instructive for organisational sociology, the very concept of decision seems to have receded. It has changed from being the anchor point of organisational sociology to possessing an increasingly insecure position. Decision seems to be transformed from an intentional communicative act via a coupling event to becoming a particular ritual among so many other rituals. Today it is very difficult to find clear theoretical definitions and portrayals of the concept of decision despite the general theoretical innovation and refinement of organisational sociology. This might be because organisational sociology is still tied up to conditions dating back to Shannon's model, despite extensive theoretical development, maybe because it has not successfully detached itself from a concept of decision as intentional action. Subsequently on may ask: If the concept of decision has become vague and insipid, then how does that affect the organisation as the object of organisational sociology? Can

organisational sociology construct its object without an unambiguous concept of decision that can ground the very definition of organisation?

Today we see reorganisations within sociology comparable in scope to those of the 1950s. The changes draw on entirely new patterns of thinking within biology (Maturana's theory of autopoiesis), mathematics (Spencer-Brown's calculus of form), cybernetics (Von Foerster's second-order cybernetics), and philosophy of language (Derrida's deconstructivism).

Different writers within organisational sociology comprise isolated insights from these reorganisations. Thus, as an example, Morgan has found inspiration in the concept of autopoiesis and Gergen and Hassard in Derrida's deconstructivism (Morgan, G., 1997; Hosking, Dachler & Gergen, 1995; Reed & Hugheds 1992).

In my opinion, the majority of these writers include the new insights in a way that curbs the radical perspectives of the original sources of inspiration, and the implications of the new ways of thinking are far from having been thought through in their present applications. If this was the case, we might once and for all succeed in departing from the conditions in the first-order cybernetics and discover a reformulation of the question of decision, which might reinstall the concept of decision at the centre of organisational sociology. As it is, the problem is that, although many organisational theorists today have never read Shannon, they implicitly assume that communication consist of intentional agents who communicate with each other through various channels, including the communication of decisions and the distribution of informational premises for decisions. The problem is that communication is often reduced to actions of information.

In the present article I will introduce Niklas Luhmann's attempt to redefine decision theory and with it also organisational theory on new grounds. On one hand, Luhmann's organisational theory draws on well-known classics. Among his favourites are J.G. March, H.A. Simon, K. Weich, and N. Brunson. Niklas Luhmann himself partook in the early revolts against the rational decision-maker in the 1950s and early 1960s and contributed articles in anthologies with Simon and others. On the other hand, the rethinking of organisational theory conducted by Luhmann from around 1980 is radical in the sense that he not only suggests a new theory but also changes epistemology. He tries to move from a first-order to a second-order cybernetics. Today, Luhmann's approach can be termed radical constructivist:

- The world is observable but only as construction, always framed by a distinction.
- Society is made up of social systems that consist of communication and nothing else.
- Man is the environment of the social systems and people only appear in social systems as semantic tricks.
- Actions are a mere phenomenon of ascription in the social systems.
- Social systems are autopoietic. They create themselves and the elements of which they consist, including their surrounding boundaries and autopoietic operations.

This approach finally breaks with Shannon's model since communication, as we will demonstrate in the following, can no longer be reduced to a transfer between sender and recipient but receives a life of its own.

The questions are: How can decisions be observed as a *form* of communication that cannot be reduced to the communicators and their intentions? How does such an observation also change our

understanding of organisation? And how does such a perspective widen and confine our possibilities for empirical observation?

My assertion is: An epistemology like the above mentioned opens up to a multitude of *how*-questions regarding the organisation, its elements, language, etc. An epistemological approach enables a questioning of all those spaces of truism from which organisational practitioners as well as theorists usually speak. It provides resistance to the many closures offered up by the countless concepts and tools for organisation and management that constantly crop up. Epistemology enables reflection whereas concepts offer speed. The price of this reflection, in turn, is the renunciation of actual explanations. Epistemology does not simply open up. The condition of its openness is that *what*- and *why*-questions are abandoned since they invoke the opposite movement. In return, we obtain a new tangible and empirical sensitivity that is not entangled in the everyday language of the organisational practitioners.

The article is divided into six sections: 1) A short introduction to Niklas Luhmann's systems theory, 2), 3), and 4) A Luhmannian form analysis of decision. Here, the most significant rocks are laid down. 5) Presentation of a proposal to observe organisations as a by-product of unfolded paradoxy. And 6) Conclusion regarding the cognitive interest in a systems theory about organisation and decision.

1. Luhmann's theory about social systems of communication

Luhmann's systems theory is rather extensive. Here, I merely wish to present the main aspects of three concepts that are central to my article: Observation, communication, and autopoiesis.

Observation
Luhmann has stated that if he were to define an undeniable core in systems theory without which the whole system would disintegrate it would consist in his thoughts on and sociological application of Spencer-Brown's calculus of form and theory about observation as operation.

Here, the fundamental point is the understanding of observations as operations of differentiation. An observation is an indication within the scope of a distinction (Spencer-Brown 1969). Thus an observation consists in an indication. Something is indicated: glasses, balance of payments deficit, idiot, etc. However, such an indication always occurs within the scope of a distinction which hence determines the observation. A distinction has two sides, the marked inner side and the unmarked outer side. When something is indicated, the inner side is marked while the outer side stands unmarked. For example, one may indicate organisational inefficiency but the observation is unable to simultaneously observe the space from which inefficiency is observed. The observer sees inefficiency but does not see the notion of efficiency that enables him to indicate inefficiency. He sees what he sees and does not see that he cannot see that which he cannot see. In other words, the distinction defines the blind spot of observation. In effect, the observation is not "controlled" by the observer. Likewise, the object of observation does not decide the way it is observed. Rather, it is prescribed by the distinction that defines the framework of the observation how which things can and cannot emerge to the eyes of the observer. Formally, this can be illustrated like this:

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    ┌──────
    │
  M │
    │
  Form
```
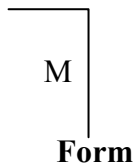
M represents the marked inner side. The outside is unmarked. Form represents the unity of the distinction, that is, the unity of that which is separated by the distinction. This unity forms the blind spot of the observation. Form does not refer to anything outside of itself, only to itself. Any form contains, therefore, an inherent paradox.

In fact, every observation conducts a double splitting up of the world. First, the observation operation divides the world into the indicated and the unindicated. But it also divides the world into observer and observed. The observer is not defined prior to the observation. The observation as operation defines observer as well as object. As demonstrated in the above example about inefficiency, it is the observation of organisational inefficiency which causes the observer to emerge as organisational observer and not as lover, priest, teacher, or something else.

An observation observes and does not see the space from which it observes and also does not see, therefore, how the observer is constituted as such. However, a second observation might observe the first observation and see the unmarked side of the first observation. This allows us to subsequently distinguish between observations of the first and second order. This is the essence of Luhmann's systems theory; it aims at observing the observations of other systems in order to study the way that systems and their environments appear in the observations, and to examine the blind spots and paradoxes that their observations involve (Luhmann 1988a, 1988b,1990a,1993b).

In order to obtain this, a systems theorist must prescribe himself two restrictions. For one thing, a systems theorist can only observe observations. Hence everything must be reduced to observations in order to work as object to the systems analysis. A systems theorist cannot, therefore, distinguish between, for example, the observation of its environment by the system and his own observations of the environments and point to errors or false consciousness when the organisation observes differently than the theorist. He must limit himself to the observation of observations and sustain from comparing the observations with "the world". The other self-inflicted restriction lies in the realisation that any second-order observation is always already a first-order observation with a blind spot of its own. Observations can also only be observed within the scope of a distinction. This distinction is the distinction between indication and distinction since the observation operation can be seen as a form that constitutes the unity of this distinction.

Communication
According to Luhmann, not only human systems observe. A range of different types of systems have the capacity for observation, e.g. biological organisms, consciousness, and social systems. Naturally their mode of observation is different since their fundamental systems operations are different. Cells are based on life, psychic systems on consciousness, and social systems on communication. Social systems thus, according to Luhmann, can observe independently through communication. The question is how? How can we perceive of social systems as independent systems of communication?

The fundamental idea is that society consists in social systems. The social systems are meaning-creating systems of communication that consist in and by communication – and nothing else. The sociality consists only in communication. The fundamental social event is defined, therefore, as communication and not as action.

Communication is a flow of selection which constantly links itself retrospectively to prior communication. Luhmann speaks of communication as the unity of three selections: information (what is to be communicated?), form of communication (how is the information to be communicated?), and understanding (how is the information to be understood?). Understanding is not a psychological concept. Understanding designates the way that subsequent communication chooses to link up with prior communication if at all. There are three points to this. The first point is that it is decided by the subsequent communication if there is to be communication at all. Monologues are not communication. Communication does not happen until there is a reply. Communication is created backwards, says Luhmann. The second point is that communication is always open to many connections. One communication provides a horizon of possibilities for connection. One piece of information can be taken seriously or taken for a joke. There is always an abundance of possibilities in one communication. Understanding simply means the choice of connection among possible connections. This implies that the connecting communication decides if there is to be communication and how. However, every connection subsequently opens up for a wealth of possible connections that are selected in subsequent communication etc. Communication is a recursive flow of possible and actual connections. Statements bring on new statements. The third point is that precisely because communication consists in such a recursive flow, no partaker in the communication can control the communication. The communication gains a life of its own, so to speak, which cannot be reduced to the partakers in the communication (Luhmann 1996, Luhmann 1995b).

Autopoiesis
The third and final concept that I wish to introduce is the concept of autopoiesis which was originally elaborated by Maturana (Maturana 1981:21). Luhmann describes systems of communication as autopoietic whereby he seeks to maintain their status as independent systems that cannot be reduced to other systems, e.g. reduced to an aggregation of human actions.

That a system is autopoietical means that a system only consists of self-producing elements. All elements in the system are produced by the system itself through a network of such elements (Luhmann 1995a: 5, Luhmann 1990b).

Communication always takes place within a social system which is autopoietically closed on itself. Social systems create themselves through communication. They create their own structures, their own communicative operations, and their own environment. When communication communicates, demands are made on the individual to communicate. A system of communication conditions itself, so to speak, as communication within the communication and demarcates itself in relation to other systems of communication. As part of this, a social system constructs its own perception of itself and of its environment. The environment becomes an internal construction in the system and in the construction of the environment the system is defined as that which the environment is not. Consequently, there are as many environments as there are systems. Through the internal constructions of the environment other systems are defined as environment as well. The many social systems are able to communicate, therefore, *about* each other to the extent that they have constructed each other as relevant environment, but they are by no means capable of

communicating *with* each other. For that, the conditioning of their communication is far too heterogeneous. As an example of this one might take law as communication. Within judicial communication there has been a gradual evolution of a very specific language with specific codes (right/wrong) and with specific institutions (parliament/administration and the court system) and with a very specific tradition for the development of new concepts through jurisprudence and case law. Hence, when employing the judicial language in a courtroom, the bounds are rather narrow concerning what, how, and with whom one can speak, which means that the possibilities of predicting the expectations of others, and thereby the possible connections to the communication, are reasonably good. The system is closed and self-producing.

I will end the more general conceptual exposition and move on to the concept of decision.

2. The form of decision

When I speak of decision it pertains to decision as a specific form of communication and observation. It concerns the observation of decision communication on the level of communication without reducing it to something else such as the impact of a decision-maker or the situation in the organisational environment and without judging the decision as being either symbolic, rational, hypocritical, or anything else. To decide and to refer to decisions is communication and will in this article only be perceived of as just that.

Thus the opening question is: What emerges if we perceive of decisions as communicative observations rather than individual choice? The problem is: How can we observe decisions through theories of communication and observation? There are two options.

1) The first option is to observe the way that decisions are observed, that is, the way that decisions are made the *object* of observation in a communication and are recognised as decisions. We then observe, for example, when a specific organisation considers something a decision and how that allows for subsequent communication. When we observe the way that other systems observe decisions we ask: Within the scope of which distinction can observations indicate decisions? That is, from where and by means of which distinction are decisions observable?

2) The other option is to observe decisions as a particular *form* of observation. Decision is then not an object that one looks at but a specific distinction that one looks *through*. Decision then comes to designate a particular *view* of the world. How does the world appear when observed from the perspective of decision? Communicating through the form of decision implies a specific way of observing characteristic of decision communication and not of any other communication. When we inquire about decision as form of observation and communication we inquire about the decision as the unity of something which is separated: When observing through the form of "decision" how is there indication within the scope of a distinction? How is the blind spot of observation defined when observing through the form of decision? That is, how is the form of "decision" identified and which observation becomes possible as a result?

I will begin with the last question. What I am inquiring about is the distinction by which decision communication happens and of which the decision is the unity.
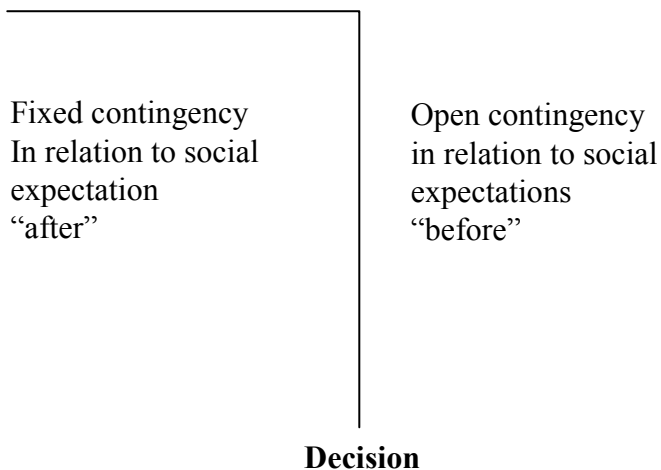
If I have reached a preliminary definition of an organisation as a social system communicating through decisions, then what I am trying to get at is the organisational *form* of communication as well, the form within which *all* organisational communication takes place.

My fundamental proposal is that decision is a communication which involves consideration of social expectations. Within any communication there is a circulation of a wealth of different expectations. These can be divided in three groups: temporal expectations directed at the future, factual expectations directed at the organisation of the world, and, finally, social expectations directed at the partakers in the communication, expectations of 'them', 'me', and 'us'. Decisions only direct themselves at social expectations. Gravity, for example, cannot be decided. Instead, decisions are directed at the expectations held by the members of an organisation in relation to each other. Decision communication is not the communication of these social expectation as such but precisely a *consideration* of the many different and maybe opposing social expectations in the organisational communication.

Decisions do not determine the future. Decisions create and fulfil in the present the existing expectations among the members of the organisation of what is going to happen in the organisation, their individual tasks and, not least, what is to be expected from future decisions. Hence, decisions create social expectations of subsequent decisions.

This kind of formation of expectations happens when a deciding operation installs a boundary in the communication between before and after the decision. A decision divides the world into a before and an after. The boundary between before and after is a boundary in the deciding observation operation. When the decision decides and indicates that we are now after the decision, "before" appears as before the decision. Not until the decision is made can the boundary between after and before the decision be traversed and "before" be described as before the decision. "Before" is always, therefore, a part of the ordering of the observation by the "after". It has to be that way. "Before" is always relative to the decision's indication of the fact that something has been decided. Consequently, "before" always moves in relation to the indication of new decisions in the communication.

In the light of the decision, "before the decision" stands out as the point of *open contingency* with respect to which social expectations among the members will dominate in the future. That is, the decision defines "before" as the point when a variety of different solutions to a particular situation were conceivable, the point when much could still be changed. After the decision this contingency, this openness regarding the end, appears in a fixed form, that is, by the possibility of having reached a different decision. Only one conclusion was reached but others could have been chosen. What could have been changed is now established. We could have done one thing but we did something else. In every operation, decision communication, as it is, shapes the distinction fixed/open contingency concerning social expectations (Luhmann 1993a). The form of decision can then be formalised in this way:

```
|
Fixed contingency          |  Open contingency
In relation to social       |  in relation to social
expectation                 |  expectations
"after"                     |  "before"
                            |
                            |
                            |
                            |
                            |
                            |
                    Decision
```

Accordingly a decision is the unity of the distinction fixed/open contingency in relation to social expectations and as a unity, decision is what divides the world in two as well as that which maintains the coupling of the two sides. This means that every decision does not merely fulfil expectations, it also produces insecurity in the sense that it becomes obvious that a different decision could have been reached. Through the deciding operation social contingency is simultaneously fixed and opened because the fixed and fulfilled expectations always appear on a horizon of other potential fulfilments. In this way new decisions are potensialised the moment a decision has been reached, that is, the creation of new possible connections for subsequent communication.

3. The threefold paradoxy of decision

This does not conclude the form analysis; we are still only at the beginning. I have identified decision as a dividing mechanism but we have still not touched upon the way that the decision is a unity of that which it divides, which blind spot it defines for communication, and hence which paradox it installs.

Since the form of decision is self-defined and cannot be given any finalised definition by any external agent, it has to, like all other forms, turn to itself and only give itself to itself. Thereby any form establishes a paradox. However, it is uninteresting to yell: look, a paradox! What is interesting is both an exact definition of the paradox and also to point out how the communication avoids letting itself be impeded by its own paradox and instead copes with and unfolds the paradox. The exact definition of the paradox of decision is, as we will see, simultaneously a definition of the "infinity machine" of organisational communication, the infinity of communication, what keeps the organisational communication going, brings it to carry on and never allows for dwelling.[2]

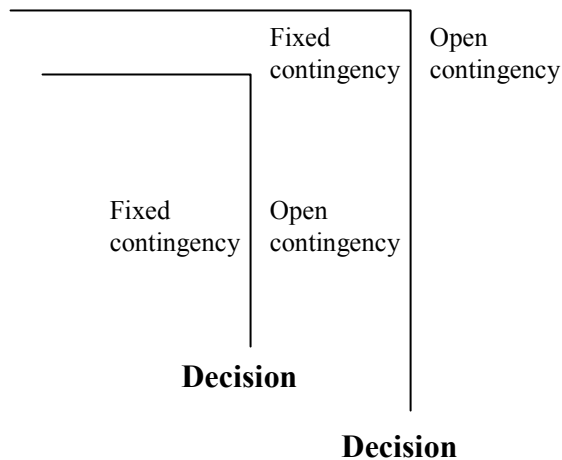Decisions are fundamentally paradoxical and the paradox is threefold:

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[2] For other attempts to reflect paradoxes in organisations see for example Westenholz, 1993 and 1999.

1. Only questions which are fundamentally undecidable can be resolved (Foerster 1989 & 1992, Luhmann 1993c & 2000b: 132). The paradox is that no decision can reach a final definition because it always simultaneously potensialises different decisions. A decision (fixation) as opposed to a non-decision (open contingency) is paradoxical because it always contains the non-decidable. Only if a decision can be reached through absolute deduction, calculation, or argumentation does it lead to a final closure or fixation of contingency without simultaneously potensialising alternatives. But if one is able to reach a result through objective analysis, it is no longer a decision but merely calculation and deduction. So-called rational decisions are not decisions at all. The form of decision excludes any form of constraint including the constraint of logic and calculation. If only fundamentally undecidable (i.e. not entirely fixable) questions can be resolved it means that decision communication finds itself in a space of freedom, freedom of choice, which cannot be analysed away. Thus, organisations cannot analytically deduct who to employ, where to place investments, or how to make priorities. The first paradox is forced freedom. In other words: the openness of fixation.

2. *Decisions fulfil social expectations of the future but are always reached retrospectively*. The basic paradox is that decision communication, like all other communication, is facing backwards. Not until a decision has been carried through is it possible to determine whether it was in fact decided, whether expectations were in fact fulfilled, whether contingency was fixed or not. This point is substantially more radical than that of Martha Feldman and James March who maintained that decisions are justified when they have been substantially reached (Feldman & March 1981: 174). Luhmann's argument is that the decision only obtains substance as decision through the next prospective decision. Only in retrospect can it be determined whether a decision really was a decision or merely loose talk, regardless of the "original" designation of the communication. Furthermore, this means that decisions constantly decide which previous communications can be regarded as decisions and thus might be used as premise for future decisions. Decision communication always link up with prior communication and select, through this linking, what is regarded as decision. Thus, it is not possible for a decision to decide whether it is decided. Future decisions need to ascribe to it the characteristics of decision in order for it to become a decision. Accordingly, practically all meetings begin by deciding what was decided on the last meeting, for example by approving of the minutes. Through decisions of the minutes the "previous" decisions become *decision premises* for current meetings whose decisions again need to be decided in retrospect in order to become decisions. Decisions produce decisions. In other words, not until a decision is recognised as a decision premise is it decided. Decision communication, therefore, is not only communication *in* the form of a decision but also always already communication *about* decisions (Luhmann 2000b: 222-256). Thus, the second paradox consists in a communicative demarcation of the accomplishment of a decision that makes a decision a decision.

2. *What a decision is, is in itself a decision.* The third paradox of decision consists in the fact that only decision is able to establish the point when something becomes a decision, that is, when something is a fixation of social expectations. Organisations do not just make decisions. They also continually decide what makes a decision a decision. Who has the authority to make which decisions? Does a decision need confirmation at a meeting or is it enough for the leader to state how it is going to be? The distinction between open and fixed contingency in relation to social expectations continuously shaped by decision communication is thus itself relative and undecidable! The time of fixation of a social expectation is not a given. Decisions have to decide themselves – and naturally, this decision is, as all decisions, based on a paradox. Accordingly, there are numerous measures for the establishment of when a decision has been reached. The measures

differ depending on the organisation, context, organisational level, etc. And the measures are always only partially fixed. This can be described as a form of re-entry that can be illustrated like this:

```
                          ┌─────────────┬──────────────
                          │ Fixed        │ Open
            ┌─────────────┤ contingency  │ contingency
            │             │              │
            │             │              │
    Fixed   │   Open      │              │
  contingency│ contingency│              │
            │             │              │
            │             │              │
          Decision        │              │
                          │
                      Decision
```

The distinction between fixed and open contingency in relation to social expectations is transcribed and re-enters itself as part of itself. This happens, for example, in attempts to fix the distinction between fixed and open contingency. Accordingly, the paradoxy consists in the "transcribed" distinction being simultaneously identical with and different from "the original" and in the re-entry being an always already re-entry. Thus, the third paradox is that even in the light of retrospect it is not obvious except through a new decision whether a previous decision is decided or not.

4. Deparadoxification

How, then, are decisions ever reached? Empirically speaking, we can observe that decisions are actually made. The way to consider this is as follows: Any communication installs a form of paradoxy into the communication. If the communication comes up against its paradox, it is paralysed. This happens when organisations observe that they are unable to decide, and empirically speaking, this is often the case. It also happens in judicial communication when the system of justice begins doubting its own form and questions whether the distinction between right and wrong is itself right or wrong. In order for communication to continue, it must avoid a head-on collision with its own paradoxy. It has to avoid seeing its own boundlessness, the fact that any final reason is a mere illusion. The communication is unable to solve its paradoxes, but it can manage these paradoxes so they do not appear visibly as paradoxes. It can manage paradoxes so that it appears that there is a reason. Below, I will call this phenomenon deparadoxification. Deparadoxification is a form of strategy for ignoring the paradox in order for communication to continue unchallenged. Deparadoxification happens through the development of paradoxes, which means that the internal distinction of the paradox is supplemented with, replaced by, and overlaid by sets of new distinctions thus covering up the fundamental form. For example, the distinction politics/ administration within the political system constitutes a paradox since the very distinction as such is political. The separation of politics and administration is necessary in order to maintain a democratic state, but an unambiguous distinction is not possible since the administration is always already political. However, this fact is obscured within political communication by a range of other distinctions, e.g. the distinction politician/government official, decision/implementation, principal/

trivial matters, etc. These distinctions are based on the distinction politics/administration but they cause the paradox to fade, at least for a while (Andersen 2000). Subsequently new distinctions have to be defined.

In relation to decision communication it is important to make decisions look decidable. Decision communication is able to deparadoxify itself by basically *making freedom look like restraint*. In a certain sense, organisational communication through the form of decision consists in nothing but continual attempts to deparadoxify decisions. The way they do it is an empirical question. In other words, this can be seen as a call for empirical studies of deparadoxifications in organisations. I will return to the implications of this later.

Although deparadoxification is an empirical question which we cannot deduce through speculation and whose conditions are historically fluctuating, it does not prevent me from providing examples of "typical" deparadoxification strategies. Below I will distinguish between three types of deparadoxifications of decisions: temporal, social, and factual deparadoxification. The three types of deparadoxification relate to the three dimensions of meaning in communication. Any communication has to establish itself temporally, socially, and factually. *Temporality* pertains to the definition of time. The actualisation of the communication, its presence, consists in the tension installed by the communication when it distinguishes between a horizon of expectations and a space of experience (Luhmann 1995b). Both past and future are constructions within the communication and they are always inter-relational. In the words of Luhmann, what moves in time is past/present/future together, in other words, the present along with its past and future horizons (Luhmann 1982: 307). *Sociality* concerns the definition of the recipients of the communication in their non-identity with each other. The social space is constructed in every communication as a tension between "us" and "them" in which no "us" can exist except in the comparison to "them". Finally, the communication has to establish itself *factually* in as far as it communicates about something. Factually, it concerns the choice of themes and objects for the communication. Themes and objects are structured according to the distinction this/something else, "being-one-thing-and-not-another".

Factual deparadoxification is fundamentally a matter of seeing decisions as reactions to "the nature of the case". The best well-known strategy for factual deparadoxification consists in supplying alternatives to choose from. Accordingly, many introductions within organisation theory often define decisions as a choice between alternatives (Luhmann 1993a). Through the presentation of alternatives, a situation of choice can exist despite the selection of certain alternatives among an infinite number of choices. But the formulation of alternatives is itself a decision dividing the world into what is important and not so important, implying decisions about the exclusion of other potential alternatives. It is not self-evident which alternatives represent alternatives among themselves. Therefore, the definition of alternatives must itself go through a process of deparadoxification. Typically, this happens through reference to the "environment" as compelling imperative. By naturalising the environment and describing its imposing tendencies, the decision becomes a reaction to the environment. The "market", "globalisation", or "new economy" address themselves and hence the environment is constructed as "someone" who decides that a decision must be reached and who becomes the natural point of reference when determining the relevance of an alternative. Reference to the environment as something given, something beyond choice, constitutes the choice as choice. Through the naturalisation of the environment alternative constructions of the environment, which would have allowed for the emergence of other alternatives, are ruled out. Thus, the organisational boundary to the environment becomes the blind

spot arresting the regress and installing the necessity of possibility. This means that the choice of factual references are decisions as well, that is, decisions about which premises for decisions are defined in order for decisions to become decidable.

Temporal deparadoxification concerns the definition of decisions as a reaction to the gravity of the moment. In order for a decision to be decided, it has to be necessary, not able to be postponed (Derrida 1992: 26). A decision is an arrest of that which precedes it; talk is interrupted by decision. The moment of decision is always a finally pressing and abrupt moment no matter how much time the decision may allow itself. Within the time dimension, deparadoxification is about the creation of this moment of decision which cannot be deferred even a moment. Colloquially, we are familiar with the problem from phrases like "the moment has come", "the moment is ripe" or the reverse, "the moment is not yet ripe for this decision" (On "the right moment" see also Kirkeby 2000). The decision must be synchronised with "the times". This can happen in a number of ways. A temporal strategy for deparadoxification concerns the sequencing of time. The undecidability of the decision is sought minimised by dividing the decision into tempi which can "ripen" the decision on the way. Considering building a tunnel between Elsinore and Helsingborg is to "big", but we can begin by finding out about the technical possibilities for doing so. By splitting the decision up into smaller bites, decidable and feasible onto themselves because the implications seem manageable, little by little premises for decisions can accumulate, making the overall decision look both smaller and less pressing, almost as a necessary and logical consequence. Decision reports contain a multitude of proposals for such sequencing, for example goal-plan-implementation-evaluation. The construction of future scenarios represents a different strategy for deparadoxification. The distinction between past and future in decision communication is a distinction between what can no longer be changed and what can still be changed. In this light, the definition of future scenarios is a strategy for deparadoxification which is intended to make "what can still be changed" look like "something that cannot be changed" as alternative paths to the future capable of defining the choice of the present. Oftentimes, a particular scenario is put forth as representing a more appealing future than the other scenarios. Like in the Roman circus, only one door hides a beautiful woman. Behind the other doors is a hungry lion. All scenarios assume different decisions. In the light of the scenarios it becomes clear which decisions are acceptable in the long run and which decisions are not, despite short-term advantages. The staging of decisions by the scenarios hides the fact that a range of other scenarios could have been formulated with the implications of completely different obvious decisions.

Finally, *social deparadoxification* is about making decisions look as if they had in fact already been made so that their formalisation is the only thing left. Social deparadoxification can happen through "political analyses" or "interest analyses" of the decision-making situation. By pointing out central players in the environment and attributing them with authority, preferences, and strategies, the decision eventually takes the shape of social imperative. While communication takes place concerning the possible stance of the managing director, what the interests of department X might be, which strategy management seems to follow at present, the decision premises for the decision are unnoticeably resolved. The isolation and description of "them" defines "us" as decision-makers. After such "analyses" the decision gradually becomes nothing more than the resolve to either accept or be at the foreground of the inevitable decision. It seems obvious that "we" must reach precisely this decision now while we can still be at the foreground and both be recognised and influence the decision.

5. The organisational system as unfolded paradoxy

I have argued 1) that decision is a particular form composed by the unity of fixed and open contingency in relation to social expectations, 2) that the form of decision installs a paradoxy in all decision communication, 3) that, as a result, decision communication can be studied as the empirical unfolding of this paradoxy as sundry attempts to make undecidable questions appear decidable. Where does this take us? How about the concept of organisation?
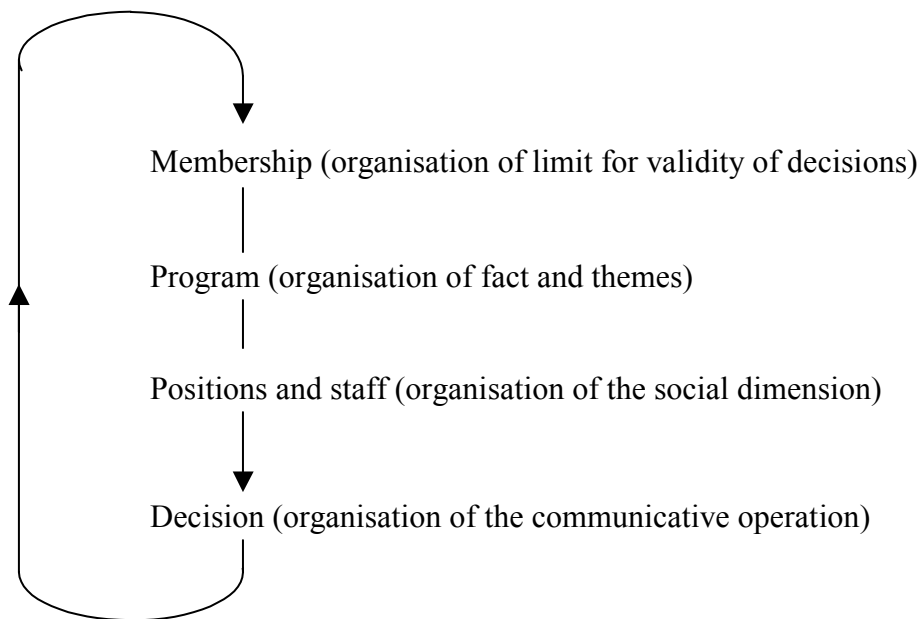
The typical approach to organisations in organisation theory is ontological. Usually, one seeks to answer the question of *what* an organisation is. One attempts to define the organisation as organisation as something given, a constant, which then allows for the study of various organisational variables: structure, culture, strategy, inner and outer complexity, etc. including the comparison of different organisations. The communication-theoretical approach, on the other hand, makes it possible to extend the problem of the organisation beyond ontology. Rather than asking what, we might then ask *how* an organisation emerges. The only needed assumption is the fact that organisational systems are formed around decision communication. Or in other words: *Organisations are nothing but the concomitant bi-product of the unfolding paradoxy of the form of decision.* All other questions concerning the elements and characteristics of organisations are empirical. With the above definition, we do not need to characterise organisations through *predefined* phenomena and elements such as culture, structure, or management. Organisations and their elements are created through the decision communication when decisions confirm decisions and transform them into premises for decisions. "What" an organisation is and consists of is a consequence of *how* organisations deparadoxify decisions and turn them into premises for decisions.

The intricate point is that organisational systems create themselves through decisions, and through decisions it is defined what a decision is. As the productive operation of the system, therefore, decision creates itself as well. This is the autopoiesis of organisations. Organisational elements are always products of the unfolding of the paradox of decision which amounts to saying that organisations are created on the basis of the impossibility of decisions.

A decision makes itself by deciding on premises for decisions and the organisational system emerges through the decision of these premises. How a premise becomes a premise is an open question that varies from organisation to organisation, but the historical conditions of the organisations' constructions of premises is also changed through the change of the language, the semantics, available to decision communication. As an example, "culture", "values", and "spirit" are rather new concepts to organisational self-description that become available when a decision turns something into a premise for decision.

Nevertheless, I want to emphasise four typical premises: An organisational system decides its *limit* as a limit for the validity of decisions through the establishment of membership, including the definition of membership and of who can be a member. An organisational system decides its purpose by deciding on some kind of *program* for what its decisions are going to be about even if the objective premise for decision is not necessarily particularly precise or obvious. The third element is differentiation and co-ordination of "actions" for example in the shape of tasks, positions, and *staff* which constitute the social premise for decision. And finally the *form of decision* is a premise for decision that has to be decided in order for the organisation to establish its limit, its program, and its staff. The autopoiesis of the organisation is illustrated below with decision as the autopoietical operation:

The organisational system

Membership (organisation of limit for validity of decisions)

Program (organisation of fact and themes)

Positions and staff (organisation of the social dimension)

Decision (organisation of the communicative operation)

But are organisations completely closed? They are completely closed in the sense that all their elements are premises for decisions, which, in order to be premises for decisions, must themselves have been decided. However, this closure also opens up the organisation, although never to the point that something "foreign" might penetrate the organisation. Organisations are open in the sense that they can communicate about the environment and thereby observe the environment. But they always observe the world from the perspective of a defined horizon that determines what they can and cannot see, and they are never able to see what they cannot see. This can be formulated differently: Decision communication can obtain information about the world but information is nothing in itself. It is not an essence. Information is, in the words of Bateson, a difference which makes a difference for a subsequent event (Bateson 1972). That is, information is always systems relative. Information cannot simply cross the organisational boundary (Luhmann 2000a: 15-22). They are not external inputs but must be produced as information by the organisational system itself. When we are dealing with decision communication, information is always a difference which makes a difference in relation to a subsequent decision communication, that is, it functions as a specific type of premise for decision – and as mentioned above, premises are always already decided premises.

6.The relationship between organisation theory and organisations

The purpose of this kind of contra-intuitive exposition of decisions and organisation is to facilitate guiding principles for observation of the second order. In the end, systems theory is no more than a program for the observation of observations and their blind spots. In this sense systems theory is also highly reductionistic. Its only object is observation. This simple foundation, however, is what brings on complexity on the level of empirical analysis. Precisely because systems theory strives for the concrete on the level of the concrete – observations as observation not reduced to something else – does conceptual precision become so significant. Without a high level of precision, second-

order observation is reduced to first-order observation. One is swallowed up by the languages of the different areas. One takes to every-day abstractions that appear concrete because of their familiarity: People act, decisions are individual choices and thus also acts, organisations are, an organisation has a culture, etc. In other words, one needs an incredible level of conceptual precision if one chooses observations and their concepts as object; otherwise one ends up merging with the observed.

In other words: Luhmann's theory about decision and organisation is *not* a theory about *what* decisions are, *what* an organisation is, or *why* organisations reach particular decisions. It is not a theory of explanations and probably not even a theory of understanding. The theory merely serves as program for the observation of *how* organisations emerge through observations. Thus, rather than a theory in the classical sense, Luhmann's theory represents a program and an analytical strategy for the way second-order observers may condition their way of seeing in order for organisational communication to appear as observable observations.

But what is the epistemological interest in this kind of approach? What does this kind of decision- and organisation theory offer? It can pose impractical questions to practice.

From a systems theoretical perspective organisation theory may observe the observations of organisations and expose their blind spots. A systems-theoretical organisation theory is able to represent as contingent and artificial that which organisations consider necessary and natural (Luhmann 1993c: 226). In this sense, a systems-theoretical organisation theory works in the opposite direction from organisations. Whereas organisations in their strategies to deparadoxify decisions need to make freedom look like restraint by referring to "necessity" and to "the nature of things", systems theory is able to reproduce "natural" and "necessary" as contingent decisions.

At a time when new truisms are introduced on a daily basis, when there exists an enormous market for all sorts of management concepts, when prospects of the future have become a commodity as well as a management technology, the most practical research strategy might be one that asks questions about the naturalness of these concepts and future prospects. Moreover, it might be practical for the organisations that impractical questions are put to them concerning their concepts, their view of the external environment, social technologies, and concepts and practices in general? For example:

> ➢ How did the "new economy" appear as semantics and become installed as natural? What does the "new economy" pave and obstruct the way for respectively? How is it assigned meaning in the decision communication of different organisations? How does the concept "new economy" open a battle about organisations' assignment of status on the time dimension as a sign of the past and the future respectively where it makes perfect sense to call a billion dollar business transaction a dinosaur while a similar deficit in an IT-company can also represent foresight?

> ➢ How do organisations deparadoxify decisions through internal constructions of their external environment? How do they introduce the environment as natural and as external imperative? What are the effects on an organisation if it becomes too conscious of its own boundary with the environment and realises the contingency of the construction of relevant environment? How does an organisation become a stranger within its own space when having a repertoire

of alternative figures of argumentation and environment constructions at its disposal (Andersen 2000a)?

➢ How do organisations seek to represent themselves within themselves? How are the conditions for self-description changed in an organisation when not only top management but the entire staff of an organisation is expected too be in charge? When defining management as a self-relation everywhere in the organisation, how can management then be identified as a delimited sub-system? How do organisations emerge at all when each individual "self-managing employee" is expected to form his own picture of the organisational unity, which produces organisations that represent themselves within themselves through countless different unities? (Andersen 2000b, Andersen & Born 2001).

➢ How is the "complete employee" produced as semantic tricks? Which mechanisms of in- and exclusion employ "the complete employee" in relation to the psychic systems? Which kind of conversational order is installed in the name of "dialogue" in so called conversational systems such as performance reviews, progress reports, and ambition dialogues (Andersen & Born 2001)?

➢ How do conditions for decision communication change when organisations see their environment as increasingly complex, undefined, and turbulent and refer to flexibility and constant change as the stable essence of the organisation? Which conditions for communication occur when adaptability replaces stability in the distinction between stability and change? (Andersen & Born 2000).

These types of question are refined when seen through a Luhmannian eye. Here, the Luhmannian universe offers a flexible and expansive analytical-strategic apparatus (Andersen 1999) while also providing the researcher with a kind of immune response to the intuitive insights of the field.

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