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Theory and Empiricism of Religious Evolution (THERE): Foundation of a Research Program. Part 1

Abstract: This two-part article presents the research program for a theory and empirical analysis of religious evolution. It is assumed that religion is *primarily* a co-evolution to societal evolution, which in turn is a co-evolution to mental, organic, and physical evolution. The theory of evolution is triangulated with the systems theory and the semiotically informed theory of communication, so that knowledge can be gained that would not be acquired by only one of the three theories: The differentiation between religion and its environment can be reconstructed based on the theory of evolution. The elements of the theory of evolution can be understood as the formation of systems. The semiotically informed theory of communication clarifies the conditions of the combination of both the systems theory and the theory of evolution as well as its objects. In turn, the combination of the systems theory and the theory of evolution can describe how communication – including religion and science – evolves and is structured.

Keywords: Religious Evolution, Systems Theory of Religion, Religious Communication, Differentiation of Religion

Zusammenfassung: Die zweiteilige Aufsatzfolge präsentiert das Forschungsprogramm zu einer Theorie und Empirie religiöser Evolution. Es geht davon aus, dass Religion *primär* eine Co-Evolution zur gesellschaftlichen Evolution ist, die wiederum eine Co-Evolution zur psychischen, organischen und physischen Evolution ist. Die Evolutionstheorie wird mit der Systemtheorie und der semiotisch informierten Kommunikationstheorie trianguliert, so dass sich Erkenntnisgewinne erzielen lassen, die mit nur einer der drei Theorien nicht zu erreichen wären: Die Differenzierung zwischen Religion und ihrer Umwelt lässt sich evolutionstheoretisch rekonstruieren, die Gegenstände der Evolutionstheorie lassen sich als Systembildungen verstehen, und die semiotisch informierte Kommunikationstheorie klärt die Vollzugsbedingungen sowohl der Kombination von System- und

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Evolutionstheorie als auch ihres Gegenstandes. Umgekehrt kann die Kombination von System- und Evolutionstheorie beschreiben, wie Kommunikation – inklusive Religion und Wissenschaft – entsteht und sich strukturiert.

Stichwörter: Religiöse Evolution, Systemtheorie der Religion, religiöse Kommunikation, Differenzierung der Religion

> "A new idea is rarely fully developed when it first occurs. [...] Indeed, when one reads an author's first expression of an idea, one is usually surprised at how vague it is. Also it may be intermingled with extraneous or even contradictory elements" (Mayr 1982, 840).

> "Is it that the incomprehensible can only be dissolved through the increase of intelligibility and ambiguousness at the same time?" (Luhmann 1981, 170).

1 Introduction[1]

How can a theory and empirical analysis of religious evolution be approached in a way that is timely, and therefore dependent on its time, i. e. being carried out having recourse to contingent, non-necessary, but also non-arbitrary truths? This question is at least twofold. First, research on religion in the 19th and 20th centuries provided outlines of religious evolution which, in a series of stages, perceived a process which was partially teleological, and as such does not hold water (general: Luhmann 1975, 195; regarding research on religion: Geertz 2015).[2] Second, quite a few scholars have disagreed upon the assumption in principle that religion actually exists as a societal domain of its own (McCutcheon 1997; King 1999; Fitzgerald 2000, 2007; Peterson and Walhof 2002; Dubuisson 2003; Masuzawa 2005). The first aforementioned problem can be approached, not by describing religious evolution as a sequence of stages, but as the emergence of

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2 Ethnologically informed research on religion knows that a ritual of indigenous religions is not less complex than, for instance, Roman Catholic high liturgy. No more than there can be the question of progress in the history of religions in view of the "magical sacramental grace" (Weber [1922] 1978, 562).

"self-substitutive regulations"[3], an overlap of respectively new layers over old ones, without the old layers disappearing. Moreover, the reconstruction should not *ab ovo* be carried out in a chronological and linear sense, but as layers to be unfolded from today's perspective, oscillating between the present and past in the sense of a retrospective genealogy (cf., regarding the genealogy of Islam, Schulze 2015, and of Buddhism, Berkwitz 2006).

The second difficulty mentioned above refers to epistemological questions, research objectives, and the concept of the object. If the study of religion is reduced to deconstructing discourses *about* religion, the object of research is conceptualized differently compared to attempts to reconstruct religion itself, i. e. that what discourses about religion refer to. Due to the axiomatic differences, the debate about empirically adequate objectives of the study of religion will hardly be handled with arguments and respective empirical analyses. Therefore, the only possibility that remains is to create the plausibility of an object called religion and its evolution through the coherence of basic assumptions, empirical analyses, and the formation of a theory. Consequently, the theory of religious evolution is doubly dependent on itself (the theory of evolution) and its empirical object (religious evolution). The theory of religious evolution itself cannot be explained beyond its reconstruction. This problem is related to the question of the absolute beginning, which leads to the paradox of the unity of before and after (Luhmann 2013a, 155). Moreover, not all questions raised in reference to its objects may be answered by means of the theory of religious evolution. Therefore, a triangulation of the theory of evolution with the systems theory and the semiotically informed theory of communication seems appropriate (Luhmann 1975 – though without reference to semiotics). These theories found, complement, and limit each other reciprocally. System-theoretical approaches have become more popular since quite some time in the study of religion.[4] It is even more so the case with evolutionary approaches,[5] though less with the theory of communication[6]. However, I am not aware of any approach, except for the one of Niklas Luhmann, which *systematically* relates all three theories to each other with respect to the research on religion.

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3 On this concept see Luhmann 1979.
4 Cf, e. g., Döbert 1973; Luhmann [1977] 1982; Luhmann 2013a; Bateson and Bateson 1987; Rappaport 1999; Beyer 1994, 70–96; 2006, 62–116; Kött 2003; Barrow, Davies and Harper, Jr. 2004; King 2007; Kauffman 2008; Klenk 2010; Pace 2011; Fuchs 2012; Heimola 2013. With regard to individual issues in the history of religions see Madigan 2001; Wild 2006; Kleine 2012, 2013.
5 As overview cf. Achtner 2009 as well as Schloss and Murray 2011; programmatically see Bulbulia et al. 2013.
6 Cf., for instance, Binder and Ehlich 1997; Tyrell, Krech and Knoblauch 1998; Pace 2011; Krech 2016a.

The following basic assumptions and explanations, due to the character of a research program, are kept rather thetic and abstract, but have been developed based on an abductive interaction between the formation of hypotheses and first empirical analyses. Furthermore, the theses are organized circularly and recursively as both the study of religion and its object proceed in this way. Therefore, I ask for the patience of the reader: redundancies are unavoidable, and not everything is immediately comprehensible. The following text unfolds fundamental paradoxes of religious evolution and its theoretical coverage as well as leading to both.

2 Basic Assumptions

The basic assumptions of a theory and empirical analysis of religious evolution include the following theses[7]:

1   Religion evolves by *differentiating itself from its environment* and forms as a *system*.

  1.1 No system exists without environment. Therefore, the religious system exists in difference to and at the same time in relation to its, i. e. religion-specific, environment.

   1.1.1 Differentiation does not equate to separation or isolation, but means distinction with its components reciprocally determining each other.

   1.1.2 Consequently, the religious system is no entirety that is composed of parts as perceived in the Aristotelian tradition. In fact, the structures and processes of the religious system—according to the newer systems theory (Luhmann 1975, 194)—are only possible and comprehensible in relation to its environment. Generally, it is the religious system's relation to the environment that determines what functions as an element, and what as the relation between elements, within the religious system.

   1.1.3 The differentiation of the religious system is carried out by the externalization of its environment, to determine it religiously within the system.

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7 The theses are presented in a very compressed manner. They are intended to guide the reader through the other chapters as their explication. However, depending on reading habits, the theses might be regarded as unreadable. In this case, the reader may skip this chapter without missing something of the text's argument as a whole.

1.2. The religious system has—as has any system—a system reference, which mediates the self-reference (system perspective) with the other-reference (system-internal observation of the system environment).

1.3 Furthermore, the religious system has—as has any system—a system-specific and a non-specific environment.

1.4 Seen from a sociological perspective, religion differentiates itself from society without becoming something other than a socio-cultural issue.

    1.4.1 The religious system, therefore, stands in a threefold relation: to itself (reflection), to other societal subsystems (performance; German: *Leistung*), and to society (function) (Luhmann [1977] 1982, esp. 56).

    1.4.2 The religious system identifies and distinguishes itself from other societal subsystems by the code transcendent/immanent.

    1.4.3 The societal function of religion consists of ultimately coping with undetermined contingency by the means of distinguishing between transcendence and immanence.

    1.4.4 The coordination between religion and other societal subsystems is, under the conditions of functional differentiation, neither a task of religion nor of other societal subsystems, but rather a matter of society.

1.5 The societal subsystem of religion stabilizes by internally differentiating itself.

    1.5.1 The internal differentiation is, on the one hand, carried out segmentally by the evolution of various religious traditions, for instance, the so-called world religions (Stichweh 2001), which can be further distinguished as secondary religions from primary religions (Sundermeier/Assmann; cf. Diesel 2006). The internal segmental differentiation of the religious system generates internal boundaries. These are then strengthened by the contact between individual religions.

    1.5.2 On the other hand, the religious system also differentiates itself in a socio-structural way alongside various social forms, which range from cults to groups, movements, schools, lineages, networks, and associations up to formal organizations.

1.6 The differentiation from the environment is stabilized by the external boundaries between religion and other societal subsystems such as politics, law, economy, science, health, social service, education, and art, all of which religion interacts with.

2 Differentiation can be best described by the means of the *theory of evolution*.

2.1 Evolution is to be formalized as "*the accumulation of changes in the organization of successive systems, caused by the differential survival of replicating units of information*" (Winter 1984, 68). It "behaves *recursively*, that is, applies the same procedure iteratively to its own results" (Luhmann 2012, 252).

2.2. Evolution proceeds in the increasing differentiation of the mechanisms of variation, selection and (re)stabilization (retention), but does not follow any inherent direction of progress (Ingold 1986, 14–28).

2.3 The increase of complexity of general evolution results from the differentiation between various evolutionary dimensions: the physical and the organic (plus the chemical dimension as a mediator between both dimensions), as well as the mental and the societal dimension (plus the cultural dimension as a mediator between both dimensions). None of the dimensions mentioned above can be traced back to one of the other dimensions, each rather has an emergent eigenstate.

2.4 Religious evolution is a co-evolution to societal evolution, which, in turn, is a co-evolution to mental, organic, and physical evolution.

2.5 The various kinds of evolution are associated through isomorphism.

3 Religion as a socio-cultural issue proceeds as *self-referential communication*.

3.1 Religion is not given *a priori*—whether that be metaphysical, ontological, epistemological, psychological, or neurophysiological, but *primarily* emerges and proceeds as communication. Something needs to be addressed as religion (including family-like terms or attributes in the tradition of Wittgenstein[8]) to be identified as religion and to be distinguished from other issues—as an explicit attribution or implicit ascription (Taves 2009, 10). This applies to religious practice and even more to its scientific reconstruction.

3.1.1 According to the assumptions of the theory of evolution mentioned above, communication, including religious communication, is to be distinguished from mental, organic and physical processes as its environmental correlate. Consequently, humans are also a part of the environment of religion.

3.1.2 Religion can become thematic with a view to mental, organic and physical aspects, Humans can also be addressed, for instance, as acting or suffering beings (or to put it in Max Weber's terminol-

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8 Ludwig Wittgenstein labels characteristics of concepts as family resemblance that cannot be fully grasped by hierarchical and categorial systematics, as concepts have blurred lines and tend to evade the categorial (Wittgenstein [2]1997, 32). With regard to the concept of religion see Kleine 2010.

ogy: as an "instrument" or as a "vessel"; Weber [1922] 1978, 546 et pass.). But in these cases as well, the subject is communication. In the case of addressing religion as a social issue, it is a matter of self-reference of societal communication, and in the case of addressing mental, organic, and physical environmental aspects of religion, it is a question of the other-reference of communication.

3.1.3 Of course, mental, organic and physical processes always belong to the conditions of religious communication in terms of necessary environmental correlates. However, if and—as the case may be— how religion system-internally addresses its environment, is not decided by the theory, but instead by religious communication itself—and within science: by empiricism.

3.2 Communication does not proceed following the model of transmission of information from a sender to a receiver. It is rather the unity of the distinction between information, utterance, and understanding and therefore a three-part selection process (Luhmann 1995c, 137–175).

3.2.1 Under the conditions of an indefinite amount of possibilities, communication has to be conceptualized as a selection carried out socially, limited in three different ways: An utterance occurs in contrast to another or remains undone—such as secrets or instruments of domination; information includes something by excluding something else; and understanding as the actualized difference of utterance and information is a selection in the sense that it can occur in many ways (something can be accepted, interpreted, rejected, misunderstood, etc.).

3.2.2 Utterance is only an offer to be selected, a stimulation that needs to be received to achieve communication.

3.2.2.1 An utterance is most probably received as relevant to religion when performed in a context that is pragmatically— i. e., socially—determined as religious.

3.2.3 Information is not transmitted, but is rather generated as a result of an independent selection within communication.

3.2.3.1 Within religious communication, information is produced through the code of transcendent/immanent.

3.2.4 Only based on the distinction of message and information, communication may produce information as a difference from a difference (Bateson [1972] 1987, 276.321 et pass.): as the difference between one piece of information and another from the difference between utterance and information.

3.2.5 Understanding (in the sense of approval or rejection—including the possibility of misunderstanding) enables the fundamental distinction of message and information. As understanding is a constitutive moment for the occurrence of communication, communication is only possible as a self-referential process.

    3.2.5.1 Understanding is religious if both a message is picked up as relevant to religion and information is produced via the code transcendent/immanent.

3.2.6 To understand communicative events as action (including responsibilities, intentions, and motifs), mental experience, or physical or organic states respectively processes, are communicative ascriptions.

    3.2.6.1 Within religious communication, actions, experiences, and physical or organic states respectively processes can be determined as religious or as relevant to religion.

3.2.7 Every social system consists of communication. Within communication, selections with regard to the system are referred to as utterance, selections with regard to the environment observed within the system are referred to as information, and both types of selection are distinguished.

    3.2.7.1 The religious system, too, consists of communication. Selections with regard to utterance are referred to as religious utterance, for instance as divination carried out by an expert, or as revelation from a god or a goddess that is conveyed by certain media, including prophets, scriptures, and special objects. Information selections are made on the basis of the code transcendent/immanent and refer to the religion-specific environment. The system-specific environment, which religion gains its semantic energy transfers it into system-relevant information, is therefore observed as specifically religious.

3.2.8 Information is generated within communication through coded events. Non-coded events come across as noise and can be perceived as a disturbance.

    3.2.8.1 The more religious communication processes in a formalized way (ritualized, dogmatized, intensified through experience, etc.), the less unspecified noise is perceived. On the contrary, religious communication to a lesser degree of formalization is rather in the condition to perceive noise and to treat it as irritation within the religious system.

3.3 In the study of religion informed by sociology, the distinction between information and utterance can be modeled as the difference between religiously determined semantic and social space.

    3.3.1 The semantic space unfolds within the dimensions of cognition, experience, and materiality.

        3.3.1.1 Religion, too, as a specific semantic space, unfolds in the dimensions of cognition, experience, and materiality.

        3.3.1.2 While cognition refers to the production of knowledge (narratives, cosmologies, dogmas etc.), experiences are socially constructed schemes of mental perception (as a condition of meditation, mystical experience, etc.). Within the dimension of materiality, communication other-referentially bears upon organic as well as physical processes and states.

    3.3.2 Social forms constitute the social space, including groups, movements, schools, lineages, networks, and associations, up to formal organizations. Social forms can be distinguished by the degree of formalization.

    3.3.3 Semantic space and social space are reciprocally related to each other. The social space can always only be accessed semantically. A certain coherence of religious communication needs to be socially designated, for instance, as a ritual, an order, or a church. Conversely, the social space determines the respective configuration of the three dimensions of the semantic space. A religious group, for example, can accentuate the dimension of experience; a ritual process is more strongly related to the body and objects; and an interreligious dialogue might highlight the cognitive dimension. The social space is the entity of the regulated performance of semantics as a "supply of distinctions" (Stichweh 2006, 161).

    3.3.4 The social space is nested in the societal space, which differentiates itself with segmentation, stratification, and function.

    3.3.5 The history of religions can be studied with a focus on the mutual relation between religious semantics and religiously determined social space, as well as with regard to the societal structure.

3.4 Religious communication, as with any kind of communication, is based on the actualization of *sign processes*.

    3.4.1 A sign is always three-part. It consists of the sign vehicle (also representamen) (firstness), the reference to an object (secondness), which itself has the form of a sign, and the interpretant, which mediates between the sign vehicles and the sign objects (thirdness).

3.4.2 The interplay of the three sign components ensures the interaction of presence (firstness), representation (secondness) and presentation (thirdness).

3.4.3 A sign is only a sign if it is translated into another sign and is further developed there (Peirce 1994, CP 5.594).

3.5 Systemic communication draws energy from the system-specific environment by means of analogies (metonymies and metaphors) and transforms it within the system to digital literality. Aided by metaphors from cellular biology, which, in turn, are taken from the metaphor of scripture, the following can be formulated: A communication system requires two processors for regulating the double input-output-process of transcription and translation.

3.5.1 This applies to all societal subsystems, including religion and science.

3.5.2 Religion and its scientific reconstruction are analogically related to each other, but do observe each other reciprocally in each case within the system in the mode of digital literality; in the case of religion based on the code transcendent/immanent, in science based on the code true/false.

4 In summary, religion is a societal communication system, which intrinsically emerges, reproduces, and further develops. Based on specific sign processes within societal differentiation, it is responsible for ultimately coping with undetermined contingency by the means of the code transcendent/immanent. *Ultimately* coping with *undetermined* contingency means that religion becomes effective, if other social processes—such as technology, law, insurances, politics, economics, medicine, etc.—have reached their limits in coping with contingency determined respectively. With the aid of analogies (metonymies and metaphors), religion gains semantic energy from its system-specific environment and, based on the transcendent/immanent code, transfers it to system-specific, digital information.

The basic assumptions suggest how scientific knowledge on religion can be achieved by the triangulation of systems theory, the theory of evolution, and semiotically informed communication theory. These insights could not be achieved with only one of the three theories: the differentiation between religion and its environment can be reconstructed from an evolutionary perspective; the objects of the theory of evolution can be understood as emerging systems; and the semiotically informed theory of communication clarifies the performance conditions of the combination of the theory of evolution and systems theory as well as its objects. Conversely, the combination of systems theory and the theory of

evolution can describe how communication, including religion and science, evolves and structures itself by differentiation.

In the following chapters, the preceding theses shall be explained to some extent. In the third chapter, I start with system-theoretical considerations on religion. The fourth chapter deals with questions regarding the theory of religious evolution. The fifth chapter focuses on communication-theoretical aspects. The sixth chapter (in the second part of the article) broaches the issue of the relation between religious evolution (empiricism) and its scientific description (theory), and the seventh chapter contains thoughts on the reciprocal transcription of metaphors stemming from the natural sciences and the social sciences as well as cultural studies.

3　System-Theoretical Foundation of the Theory of Evolution

The general theory of evolution is based on prerequisites that it cannot control itself, but which can be clarified with the help of systems theory. This particularly applies to the reconstruction of the distinction and coordination of the three evolutionary mechanisms of variation, selection and (re)stabilization (selective retention) (Mayr 1982). "While evolutionary theory distinguishes variation, selection, and restabilization, it also assumes stability (the state of being restabilized) with the idea of variation.[9] In addition, it builds this distinction into a systems theory, presupposing that a distinction to a system's environment can only be distinguished with a system" (Luhmann 2013a, 151). To clarify: differentiation does not mean isolating separation, according to which the distinguished elements have nothing to do with each other. Differentiation, on the contrary, means that the distinguished components reciprocally refer to each other. Differentiation, as an interruption of interdependence, is the enabling foundation for inter-action.[10] "Systems theory begins with the unity of the difference between system and environment. The environment is a constitutive feature of this difference, thus it is no less important for the system than the system itself" (Luhmann 1995c,

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9 This also applies for cases when dealing with the plural: Considering the term, in the field of religious studies, for instance, one occasionally resorts to using the plural "religions" (cf. as overview Figl 2003). However, epistemically, the plural requires the singular to designate varying religions and to compare them regarding equal/unequal.

10 In this sense, Michel Serres [1985] 2008, 78 asks: "Could separate elements join together more easily than inseparable ones?"

212). The study of religion reconstructs the religious system by focusing it in difference to other objects. The religious system as the object of the study of religion empirically constitutes itself via the difference system/environment and therefore gains identity, based on which it becomes identifiable. It is, therefore, a question of the difference from a difference.

Based on second-order cybernetics, the newer systems theory highlights that for each system there is a non-specific environment, within which only noise prevails for the system, as well as a system-specific environment. With respect to meaning-constituting systems (*Sinnsysteme*, i. e., psychic and social systems) this means: "An environment functioning for a system is [...] necessarily a two-part reconstruction of the environment itself, it is horizon and transcendence, expectation and disappointment, selection and risk, order and disorder. It is only on this basis that an interest in the environment can develop, that there can be attempts at influence and correction be given, and learning processes evolve" (Luhmann 1982, 16). Moreover, the systemic difference consists of the unity of the distinction between self-reference and other-reference so that the difference of system/environment occurs twice: "as difference *produced through* the system and as difference *observed in* the system" (Luhmann 2012, 19). As a result, a double input-output-process occurs, which can be modeled as follows (Figure 1):

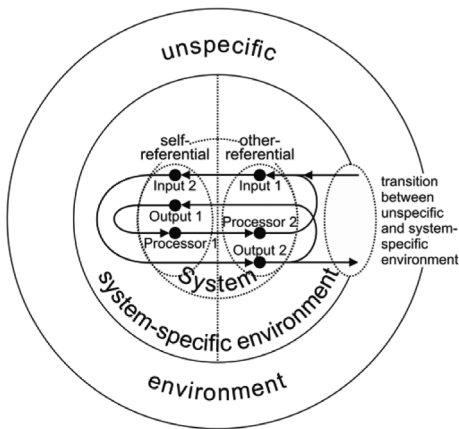**Figure 1:** Double system-environment-difference and double input-output-process

A system constitutes and reproduces itself as a system-environment-difference through output 1 (externalization), which the system processor 1 initiates from. In systems theory, this process is called autopoiesis (Maturana and Varela 1980). In terms of the reconstruction of religion this means: Religion evolves and repro-

duces from religion itself—and from nothing else. From a system-theoretical point of view, religion is thus a *sui generis* issue, without turning to anything else than a socio-cultural issue based on historical development.[11]

Apart from the first processor, the system requires a second one, because: "[...] self-reference on the level of basal processes is possible only if at least two processing units that operate with information are present and if they can relate to each other and thereby to themselves" (Luhmann 1995c, 138). By means of the second processor, which enables selection, the system draws energy from either the system-specific, or, mediated by the system-specific environment, from the unspecific environment in the form of input 1 and transfers it, whilst possibly filtering noise, via input 2 into system-specific information.[12] This process corresponds to Gregory Bateson's understanding of information as "a difference which makes a difference" (Bateson 1987, 276.321 et pass.). Eventually, the system produces a new output. This output is partially released as output 2 into the environment, i. e. is not processed further by the system. Otherwise, the output generates the starting point for the reproduction of the system-internal difference between the system and environment in the form of output 1. Input 1 and output 2 are localized at the crossover between the unspecific and the system-specific environment.[13]

The religious system, too, has a system-specific and a non-specific environment. Anything that religion observes as non-religious but interprets in a religious way is a part of the system-specific environment; i. e. religion projects its own pattern onto the environment and then selectively takes the environment into the system, for instance, as cosmological and/or social disorder, as 'false' cognitions (disbelief, superstition, atheism, magic, folk religion, etc.), or considered ethically as behavior deviating from divine commandment and prohibition,[14] but also as a

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11 The alternative is therefore avoided: to either determine religion by theology or the phenomenology of religion, or to explain it away. The *sui generis* approach of the social constructivism as seen here is not a 'nostalgic expression' (McCutcheon 1997, 32–37), but an epistemic necessity if one is to do justice to the object of religion.

12 A sensitivity to the unspecific environment comes up when there is a lack of coordination of variation and selection in the system Luhmann 2013a, 181.

13 The double input-output-process needs to be specified in the course of this article. It applies for meaning-constituting systems (i. e. for psychic and social systems, therefore for the religious system, too), however, also for cellular processes, within which DNA is transcribed into RNA (but also RNA into DNA and RNA into RNA) (*transcription*) and the nucleotide sequence of the mRNA translated into the amino acid sequence (*translation*) (Janning and Knust ²2008, 161–188).

14 In the terminology of Jewish ethics, for instance, there are terms such as חַטָּאת, חֲטָאָה (failure of reaching a goal and at the same time its atonement) as well as עֲבֵרָה (transgression); in Christian ethics, offences are attributed as sins (Greek: ἁμαρτία; Latin: *peccatum*), which are ritually atoned

legitimation of the *status quo*, or as with dignity provided freedom of the observed environment. In ancient societies, the distinction between the religious system and the system-specific environment was sacred/profane; a distinction which is comparatively strongly tied to the physically semioticized space.[15] This restricts the possibility of variation of religious communication, but, on the other hand, makes answering the social question of where religious communication can be carried out easier, and therefore increases the chance of follow-on operations: Physical places including their objects (buildings, squares, ritual objects) are provided with religious meaning and function as a "material anchor" (Hutchins 2005) for religious communication. The evolutionary distinction of transcendent/ immanent increases the spectrum of variation based on rising deterritorialization. From here, the development of religious-semantic spaces which tend to be independent of physical space, but make metaphorical reference to it, as well as renewed material embodiment and territorial relocation, is possible (Glei and Jaspert 2016). In the functionally differentiated society, the distinction between the religious system and its system-specific environment is religious/secular; however, this distinction may sometimes considerably vary semantically (Burchardt, Wohlrab-Sahr and Middell 2015). The distinction religious/secular regulates the relationship between religion and other social subsystems such as politics, economy, law, science, education, arts, health, or social aid. It only makes sense to speak of, for example, *secular* law or *secular* science, if law and science are to be distinguished from religion, but thereby still are related to religion, or, conversely, if religion refers—positively or negatively—to law and science. The three pairs of distinctions (sacred/profane, transcendent/immanent, and religious/secular) are in a relation partially to a historical process (in the sense of overlapping, and not replacement!) and partially in an epistemic relation. Due to the historical occurrence of the respective following distinction, the respective preliminary distinction comes into (reinforced) reflection (Schulze 2015, 124–147). The reconstruction

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or forgiven; in Islamic ethics, the Arab terms *ḫaṭaʾ*, *ḫaṭīaʾh*, *iṯm* and *ḏanb*—each with different connotations and partially in view of the conceptual pair *ḥarām/ḥalāl* (permitted/forbidden, including the 'grey area' *makrūh* [frowned upon, undesired])—stand for religiously understood misconduct.

15 The Latin word *fānum* describes the holy place dedicated to the gods. Therefore, the *profānum* is the place in front of the temple, but which is directed towards (*pro*) the *fānum*. The Latin word *templum* and the Greek word τέμενος can be traced back to the root τεμ (= to cut). Thus, sanctuary means the cut off, and with the cut the distinction between immanent and transcendent is met, which is strongly bound to the physical space, though. However, what is limited this way does not belong to one side of the distinction, it symbolizes it as wholesome, creates its metonymic unity. A physical place or building can never depict the pure transcendence, because the depiction is always performed under immanent conditions.

of the distinctions transcendent/immanent and sacred/profane starts with today's distinction of religious/secular and proceeds by unfolding the evolutionary layers that have been formed earlier, but which are still in force today.[16]

Religion has no relation to the unspecific environment. The unspecific environment of every system "contains no information. The environment is as it is" (Foerster [2]1984, 263). The non-specific environment can only come into question from an outside observation, for instance, in the study of religion. It is an empirical question of concrete historical research to determine what belongs to the system-specific and what to the non-specific environment of religion. There are two relevant criteria for the scientific consideration of the unspecific environment within the study of religion: as environmental conditions (being possibly ecological, physiological, and psychological substrates of religion), and as a take-off for the emergence of religion. The unspecific environment is only relevant for scientific research on religion if the emergence of religion can be reconstructed by means of respective observations. For the description of the varying, selective and (re)stabilizing proceeding of religion itself, the unspecific environment is of no relevance. The difference between unspecific and system-specific environment of religion is relevant for the discussion about the question whether religion adopts to its environment or is to be understood as an evolutionary by-product. For example, those communicatively addressed religious experiences, which have certain neurophysiological and corresponding behavioral patterns as environmental correlates, can prove themselves during evolution. However, correlation does not necessarily only mean adaption (Bulbulia 2004a, 2004b; Alcorta and Sosis 2005; Sanderson 2008; McNamara 2009, 248; Sosis 2009; Rossano 2010, 151; Heimola 2013), but also at least selection, which *ex-post* turns out to be successful and therefore is an evolutionary by-product (Kirkpatrick 1999, 2006; Boyer 2003; Atran and Norenzayan 2004; Pyysiäinen and Hauser 2010; Norenzayan et al. 2016). But even if religion is understood as an adaptation to the environment, its autonomy in the form of religious concepts, experiences and practices must be subject to the basis on which it can adapt to its environment (Kunz 2009). In order to avoid unilateral causality assumptions, it makes sense to distinguish between adaptive religious elements and religious elements as accidental evolutionary by-products and to reckon with both possibilities (Voland 2009).[17] Advantages of the

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16 Possibly, there are correspondences between the three pairs of distinction and the distinction between the adjective 'religious', its nominalization as 'the religious' and the noun 'religion'; cf. Stausberg 2010. This is to be examined semantic-historically.

17 According to Rüdiger Vaas 2009, the respective data is consistent with the adaption hypothesis, but is insufficient to prove it. For the discussion about adaption and by-product hypothesis, cf. Richerson and Newson 2009 as well as Pyysiäinen 2012. Bourrat 2015 pleads for a combination.

selection of religiously coded experiences in connection with general socio-cultural and psychic evolution are often scientifically seen in the fact that religion is based on the release of endorphins (Dunbar, Barrett and Lycett 2005, 166) and the messenger dopamine (Previc 2006; Wilson 2014, 89), or by means of specific ethological and psychological-cognitive patterns such as group adherence (Sosis and Kiper 2014), providing an especially pertinent reference to the physiological, psychic and social environment. However, in their own right, physiological, and psychological processes of this kind are not necessarily concerned with *religiously* determined experiences and communicatively ascribed behavioral patterns, and the mentioned process only explain extra-religious factors and consequences. A pronounced religiosity may also display high statistical correlations with fertility rates (Frejka and Westoff 2008; Weeden, Cohen and Kenrick 2008; Zhang 2008; Blume 2009). But this connection is only then part of religious evolution if the social form of the family, of parenthood and offspring, is attributed a specific religious sense—be it related to humans or with regard to gods and goddesses (regarding Christian religion, cf., for example, Böhm et al. 1995; Jacobs 1999; Jacobs and Krawiec 2003; Albrecht and Feldmeier 2014; Reynolds and Witte, Jr. 2007; religious-historically spanning: Nielsen 1922, 68–144; Browning, Green and Witte, Jr. 2006; Nissinen and Uro 2008). The same applies for determined correlations between religion and subjective well-being (Witter et al. 1985; Emmons 1999; Joshi, Kumari and Jain 2008; Baker 2011), mental health (Hackney and Sanders 2003; Gilbert 2011), the feeling of happiness (Ferriss 2002), group solidarity (Voland 2009, 15), and cooperation (Bulbulia and Frean 2010; Norenzayan 2013)—especially under the conditions of subsistence economy (Peoples and Marlowe 2012). This may all be of use for the environment of religion. However, a particularly efficient form of coping with undetermined contingency based on the code transcendent/immanent is the distinct feature of religion within socio-cultural evolution, *differentiated from* other societal processes that cope with contingency determined respectively, for instance through law, technology, and insurance. The religious coping of undetermined contingency may include family, well-being, health, group solidarity, cooperation, as well as other elements, by means of analogies and providing these topics with specific religious meaning. Only if this happens, can factors such as those mentioned belong to religious evolution. From there, religion can serve as a component of socio-cultural evolutionary performances for other societal subsystems and social forms as well as psychic systems in the form of offering sense and realize the societal function of

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For the reciprocal adaption of organic and socio-cultural processes, see Laland, Odling-Smee and Feldman 2000.

coping with undetermined contingency, in difference to determined contingency that other societal subsystems deal with (e. g., by means of law, technology, and insurance).

The distinction between unspecific and system-specific environment correlates with the distinction between system-environment-relations and system-system-relations. "Reference to the 'environment' contributes nothing to system operations. 'The environment' gives no information. It is only an empty correlate of self-reference. If we are dealing with system-system relations, however, indicatable entities do occur in the environment. In this case, too, the system cannot cross its boundaries *operationally* (if it did it would have to operate in the environment), but it can observe, that is to say indicate what specific states of affairs in the environment (other systems) are specifically relevant for it. In the relationship between system and environment, the system operates *universalistically,* in the form of a crosssection of the world. In relations between systems, it operates *specifically,* in certain, contingent modes of observation" (Luhmann 2013b, 10). The transition between the unspecific and the system-specific environment of religion is mediated via other systems. For each system, as mentioned, a specific environment exists. Economics, for instance, observes its specific environment based on the system-internal distinction paying/not paying. This distinction, in principle, belongs to the unspecific environment of religion, but may also become relevant for religion, if relations between religion and economy are taken into consideration. In this case, economic processes get into the system-specific environment of religion and can be encoded system-specifically, for instance, by observing usury as sinful and therefore prohibiting interest,[18] or conversely, viewing profit as a sign of divine election (Weber [1930] 1992).

The output released into the environment by the religious system may be ignored, rejected, or accepted as an offer of sense by other societal subsystems and psychic systems through transferring the noise into respective system-specific information. The religious system, however, has no direct influence on either its specific or, above all, its unspecific environment. The specific environment of the religious system is relevant to the study of religion, if the religious system refers to it, namely only then, if the religious system operates other-referentially with regard to other societal subsystems (for example, as political religion) and

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18 For Jewish and Christian observations of moneylending, cf. the contributions in Heil and Wacker 1997. For the attempts to deal with the issue of interest from the Islamic perspective—in the form of *Islamic banking*—under today's economic conditions, see, e. g., Casper 2016, 2011 and the contributions in Iqbal and Llewellyn 2002. The various configurations of religion and economy must be described with the help of evolutionary theory and systems theory.

psychic systems (such as person-related religion with self-disciplining impacts or in the form of subjectification).

Religion, as a societal subsystem, has three system references: The relation of the religious system to the comprehensive societal system (function), the relation to other societal subsystems (performance; German: *Leistung*), and the relation to itself (reflection) (Luhmann 1982, esp. 56) (Figure 2). There is no hierarchy of any of the three system references over the others. In a functionally differentiated society, every societal subsystem—including religion—has to consider all of them synchronically. Otherwise, it would collapse.
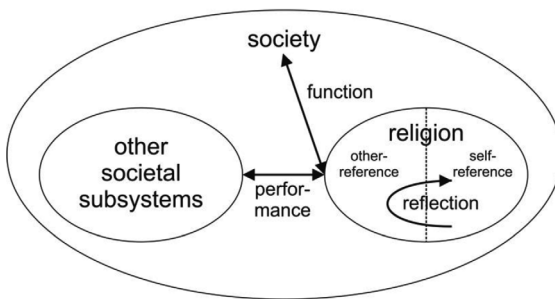

Figure 2: The three system references of religion

The acceptance or rejection of performance and function belong to the specific environment of the religious system. They are other-referentially observed by religion and may be taken into reflective consideration. The system itself also consists of three levels (Salthe 1985), which in literature are labelled differently, such as "the level of interest" (the system), "the level without" (the system environment) and "the level within" (the components of the system) (Patten 1975), or as the "composition" of the system, its "environment" and its "structure" (Bunge 1979). From those three system levels, the three references, according to Niklas Luhmann, are the self-reference, the other-reference, and the system reference. But how can the differentiation of religion be understood? This question can be approached from an evolutionary theory perspective, which is the topic of the following chapter.

4 Evolutionary Foundation of Systems Theory

4.1 General Considerations on Evolutionary Theory

While systems theory—as was shown in the previous chapter—may clarify some conditions of the theory of evolution, evolutionary theory is able to describe how systems evolve from their environment and integrate parts of their environment. In principle, it needs to be emphasized that evolution is, strictly speaking, not a process. The evolution of religion can be described as a process, however, only with hindsight, in the sense that later conditions are prerequisites for earlier ones in scientific reconstruction—in contrast to pure chronology, but according to a retrospective genealogy. "Yet there is little scientific benefit from that. The idea of process may be suitable as a framing idea for narratives, yet all attempts have failed to determine precisely how such a process is structured" (Luhmann 2013a, 159). This applies for attempts to determine developments via natural laws, as well as for phase models and (new) dialectic developmental theories. The theory of evolution, too, is occasionally understood as a process theory—but in a misleading way. Seen from a logical perspective, the differentiation of the three evolutionary mechanisms of variation, selection and (re)stabilization (selective retention) is a circular structure: First, the term variation already presumes stabilization (what should something vary from, if not from something stable [= as identity] prerequisites?). Second, the differentiation of the three mechanisms itself is the result of evolution. "The task of theory is to clarify unplanned structural changes, and thereby the 'morphogenetic' construction of complex systems (or with Darwin, the diversification of species). [...] Every treatment of morphogenetic questions in evolutionary theory has to pay particular attention to how forms of variation and forms of selection are separated. That is the special hallmark of evolutionary theories today—and not, for instance, periodizations concerned with progress" (Luhmann 2013a, 152.182). As for the space-time continuum, both the *expansion* of structural complexity and the structural *changes* must be taken into consideration.

The theory of religious evolution is neither a simple copy of nor a successor to the theory of socio-cultural evolution, because variation, selection and (re)stabilization (retention) of religion always proceed within the evolving and self-reproducing religious system. Nor is socio-cultural evolution identical to biological evolution (Winter 1984; Campbell 1965; Lumsden and Wilson 1985; Richerson and Boyd 2005, 191–236). The different kinds of evolution are related to each other in a metaphorical way (Maasen, Mendelsohn and Weingart 1995). The metaphorical relation allows the comparison regarding equal/unequal. The possibility to apply elements of biological theory of evolution to the theory of societal evolution is

based on a isomorphism between organic evolution and socio-cultural co-evolution, and equally, religious evolution is isomorphic towards socio-cultural evolution.[19] A isomorphism between the different kinds of evolution is given, if evolution is conceptualized as "*the accumulation of changes in the organization of successive systems, caused by the differential survival of replicating units of information*" (Winter 1984, 68). To adequately transfer elements of the general theory of evolution to the evolutionary theory of religion, the differentiation between the evolutionary dimensions of the physical, organic, mental, and social as well as within the social the societal internal differentiation—amongst others differentiating religion—must be taken into consideration. The social possesses an emergent *eigenstate* compared to mental processes (Lohse 2011)—as it is the case with consciousness[20] compared to other mutually coordinated neurophysiological processes as its environmental correlate[21], and between organic compared to physical processes (Kauffman 1995, X).[22] The *eigenstate* of each evolutionary dimension means that interdependence is interrupted.

A theory of religious evolution, which is held in the perspective of a sociologically focused study of religion, must take its starting point with societal evolution. In this perspective, religion differentiates itself from society and becomes a societal subsystem, without turning into anything other than a socio-cultural issue. From there, religion receives an *outstanding* societal significance.[23] The take-off of societal evolution consists of the externalization of natural (physical, chemical as well as organic) and mental processes to then system-internally designate them other-referentially and process the respective information self-

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19 According to Tim Ingold 1986, 30, there are "two ways in which the theory of biological evolution can be applied to humanity and culture: by *extension* and by *analogy*." Extension, in the presented approach, is out of question, because it does not consider the interruption of interdependence between the different evolutionary dimensions, but rather short-circuits them. For analogies between biotic and social evolution, cf. Burkhard Stephan 2005 as well as the respective comments, for instance, Antweiler 2005. However, in contrast to the approach presented here, Stephan claims that "all social subsystems and the macrosocial conditions are developed and shaped by humans" (Stephan 2005, 357).

20 According to *integrated information theory*, understood as causal interaction between numerous cerebral areas and the integration of information processed in those areas (Tononi 2008, 2012).

21 Certain neurophysiological processes are externalized from language as the unconscious or the subconscious and are other-referentially addressed by language (Bazan et al. 2002). Warren S. McCulloch 1945 refers to the organization of the brain as "heterarchy".

22 Cf. also Bunge 2010, vii: "[...] physics can explain neither life nor mind nor society."

23 I owe the spatial metaphor of *outstanding* to Thomas Hauschild.

referentially. The societal syntax is based on the semiotic differentiation of signification, signifier, and signified, because: "Societies would never have gotten under way if people had not learned to distinguish between words (self-reference) and things (other-reference)" (Luhmann 2013a, 21). Among other societal subsystems, religion differentiates itself from societal processes. This differentiation is only possible based on the general theory of evolution, which is structured, among others, through the following distinctions:
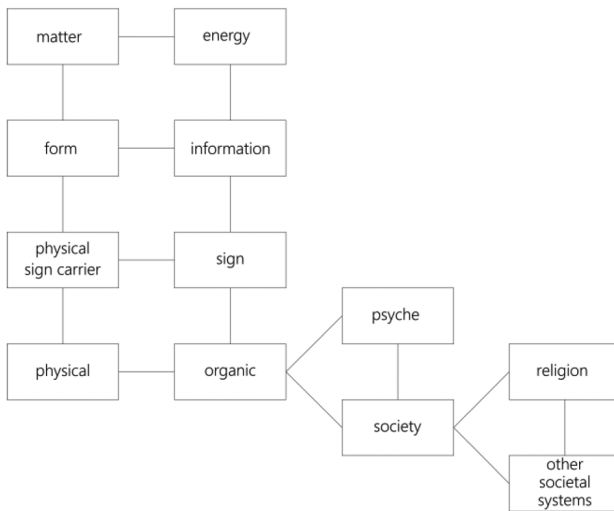

Figure 3: Evolutionary distinctions

Only if these distinctions—among others—are taken into account within the theory of religious evolution, it can be understood why and how religion refers to them in its own semantics (for instance, as dualism, holism, attempt to overcome those distinctions, etc.).

Social differentiation establishes via *topic-based, situational*, and *institutional differentiation* as well as—regarding societal structure—via *segmental, stratificational* and, eventually, *functional differentiation*. For these kinds of differentiation, too, it is true that, from a historical point of view, they are not to be understood as an altering sequence, but rather as layers overlapping each other[24], and that, from

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24 "Segmentary, stratificatory and centre-periphery differentiation may persist simultaneously with functional differentiation" (Müller 2006, 177).

an epistemic perspective, the respective previous ways of differentiation through the succeeding arrive at (reinforced) reflection. The reconstruction of the previous kinds of differentiation must, therefore, have their starting point in today's functional differentiation and proceeds by exposing the evolutionary early forms of differentiation, which are still in force under the conditions of functional differentiation.

Taking the autopoiesis of societal evolution into consideration, i. e. the issue that society only evolves from society and reproduces only from society, "[n]either preexisting fundamental human needs nor social functions are therefore useful starting points for evolutionary explanations" (Luhmann 2013a, 154). Human needs and social functions are instead relevant for the connectivity of new developments and thus for problems of evolutionary stabilization. The same applies to religious evolution. In the perspective of functional differentiation, religion has indeed a societal function, but this does not apply to the same extent for its genesis and not at all for its evolving self-description. Furthermore, it seems reasonable for religion, under the conditions of attribution towards persons as correlates of functional differentiation, to react to mental needs other-referentially. But this does not apply to the same extent for historical development and explains even under modern conditions nothing, or if at all, only indirectly something about religion's other-referential conditions of performance.

The theory of religious evolution draws on the three evolutionary mechanisms of variation, selection, and (re)stabilization. However, in difference to the biological usage of the theory of evolution, its application in the study of religion refers variation to religious operations (i. e. particular communication), selection to religious structures (expectations, regularities, standardizations, etc.), and restabilization to the relation between the religious system and its environment. Operations, structures, and systems cannot, of course, occur independently from each other (therefore the theory of evolution is necessarily circular). But evolution proceeds based on the differentiation of the three mechanisms. The formation of the religion-specific code transcendent/immanent and the selections within the religious system, based on this code, can only be understood if the differentiation of the evolutionary mechanisms of variation, selection and stabilization are taken into consideration. Operations are always a matter of communication; they are events that have no duration. Variation can only be the matter, if communication is registered as unexpected and/or divergent. This is usually (as already at the early stage of societal evolution) ascribed to the situation and remains without consequences. In the case that variations indicate structural patterns, which diverge from the usual, the question of positive or negative selection will be raised. Topics can then be framed by

religious meaning or fall out of that framework, if other interpretations are communicated successfully.[25]

Religion co-evolves with societal evolution, which in turn is a co-evolution to psychic, organic, and physical evolution. Religion is not—however: metaphysically, ontologically, or epistemically—*a priori* given, as religion unfolds from societal evolution. Yet it is a socio-cultural reality *sui generis*, i. e. it cannot be traced to anything than itself in its emergence, reproduction, and further development, as it is also the case with other societal subsystems.[26] Consequently, it is the task of the theory of religious evolution to describe religion in both its autonomy and as a societal function.

4.2 The Differentiation of Religion

"There can never have been a state of society in which every communication was religious communication. In such circumstances, religious communication would not have been distinguishable; it would moreover have been impossible to signify it as religious. If there is religious communication, there always has to be non-religious communication as well" (Luhmann 2013a, 133). This difference-theoretical approach is an argument, first, against the assumption of a pan-sacrality, according to which all societal development had its beginning in religion; for instance—though already requiring an advanced society—in the shape of theocracy and temple economy.[27] Second, a consequence of this approach is that religion differentiates from general societal evolution. The take-off of religion

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25 For the analytical concept of framing, cf. Goffman [1974] 1986.

26 The *sui generis* character of religion is meant in the sense of Luhmann 2013a, 33: "[...] social systems are observing systems—sui generis ones, with their own distinctions and with no inherent capacity for perception." However, the *sui generis* character does not mean that religion proceeds in isolation: "By reconfiguring the macro-structural and cultural physical, temporal, social, and symbolic spaces, as well as differentiating micro-level aspects like roles or goals, religious autonomy makes religion a force *sui generis*. It provides conduits for religious goals and decisions to impact political or economic orientations in ways that alter how political or economic actors orient their attitudes or actions, and therefore, affects the historical path a given local, regional, state-level, or international group of people embark upon" (Abrutyn 2013, 15 f.).

27 Cf., for instance, Frankfort [1948] 1978, 221: "[...] the feeling that man depends upon the gods pervaded the whole of Mesopotamian life, and each settlement centered round one or more temples. If power was vested in the assembly of free men, that power depended upon the sovereign will of the gods. The same group of people who constituted themselves in an assembly with its elders for political purposes formed a socio-religious organization which we call the temple community."

consists of identifying *topics* in its specific environment and transforming them into specific religious information. This equals output 1 that stimulates processor 1 and founds the system/environment differentiation in the system being modeled in the chapter on system-theoretical foundation of evolutionary theory (cf. Figure 1, p. 12). Topics are fluid, frequently change and therefore are difficult to control, as elementary face-to-face interactions and social gatherings still demonstrate today. Religion, therefore, exposes itself to strong environmental influences by topic-based differentiation. The reason for other-referential orientation is that religion at the early evolutionary stage still cannot *systematically* differentiate—from a system-theoretical perspective—between self-reference and other-reference as well as—from an evolutionary perspective—between variation and selection. The evolving religious system, therefore, uses environmental conditions for building up structures, which it could not perform from within itself. The environmental conditions religion is exposed to consist of societal processes, of mental perceptions, and—mediated by them—of physical as well as organic processes. Hence, for a long period of religious evolution a mode of evidence exists, which coordinates communicative processes with mental and—mediated by them—organic as well as physical processes, without systematically differentiating between self-reference and other-reference as well as between variation and selection.[28]

Other-referential orientation of religion towards the perception of psychic systems enhances the chance of supernatural semioticized powers to emerge and to become imaginable—particularly anthropomorphized (Guthrie [1993] 1995) and embodied in material objects that have an agency of their own; for instance, as

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28 Based on these considerations, the question of prehistoric mentality needs to be reconsidered. The concept of "mystic participations" by which Lévy-Bruhl [1922] 1923, 35 designates 'the intellectual world of the primitive', covers the unity of reality and dream, presence, past and future as well as initiation and expression of an event (also cf. Dux 1982). Furthermore, the phenomenon of "the multi-presence" (Lévy-Bruhl 1923, 107) excludes or mediates between one and many, equal and unequal, as well as animate and inanimate. Therefore, a person, for instance, can be present in different places at the same time, and physically non-present individuals (persons, animals, objects) can be made present. Even though the concept of "mystic participations" as brought forward by Lévy-Bruhl is untenable, one can still assume a fluidity between the physical-organic and the socio-cultural level, which characterizes Paleolithic thinking (Clottes 2010, 22). However, fluidity does not mean a state of lacking differentiation. We might not know whether the distinction between technical-instrumental and explicative action was stable in the cognitive household of Stone Age communication, but various states of reality must have already been identified; otherwise the formation of a socio-cultural reality and first approaches of the formation of societies would not have been possible.

special powers, objects, ancestors, spirits as well as goddesses and gods.[29] One of the most crucial paradoxes of religion consists in the fact that one cannot directly see, hear, smell, and touch everything that has an effect and therefore cannot behave in an ordinary everyday manner towards those powers. To interact with sacred powers, they are averted by embodying and sensualizing them in the shape of specific images, objects, and behavior. This applies to the early stage of religious evolution and equally so for the kind of modern-era religion that is strongly oriented towards other-reference with regard to mental, organic, and material processes and states (Houtman and Meyer 2012; Pintchman and Dempsey 2015).

Religion initially experiments with distinctions that are rather unspecific and therefore not appropriate for internal stabilization, such as invisible/visible, beyond/here,[30] desensualization/sensualization, disembodiment/embodiment, unfamiliar/familiar, secret/public, and guilt/expiation or atonement. Because of the topic-based differentiation oriented alongside other-reference, the evolving religious system must discipline itself and restrict the abundance in variation, which evolves through considering unbridled mental imagination in religious communication. This happens via the *re-entry* of distinctions such as those mentioned within themselves on the side of immanence (in this world, in the familiar, in the embodiment, etc.).[31] For the evolving religious system, the following also applies: There is no information from the outside. Religion must, but also can

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29 Regarding superhuman agency in theories of religion, see Stausberg 2010. With respect to the materiality of divine agency cf. Pongratz-Leisten and Sonik 2015.

30 The German word 'Jenseits' ('world beyond') is of modern origin (Hölscher 2007), but the issues designated, however, can be traced back to the beginnings of societal formation.

31 Niklas Luhmann (e. g., 2002, 20.24–26 et pass.), following George Spencer Brown 1979, refers to this process as *re-entry*. Religion is therefore based on an impredicative process, and the same applies for its scientific reconstruction. By means of the impredicative process, an element is defined by a quantity, which itself requires the existence of this element. The approach of the impredicative process is usually laid out as follows: "When a set M and a particular object m are so defined that on the one hand m is a member of M, and on the other hand the definition of m depends on M, we say that the procedure (or the definition of m, or the definition of M) is *impredicative*. Similarly, when a property P is possessed by an object m whose definition depends on P (here M is the set of the objects which possess the property P). An impredicative definition is circular, at least on its face, as what is defined participates in its own definition" (Kleene 1952, 42); in more formal words: "[...] a defined symbol a_1 is called impredicative when an unrestricted operator with a variable to whose range of values a_1 belongs, occurs in its chain of definitions" (Carnap 1937, 163). The argument that the impredicative process is a "vicious-circle principle" (Russell 1908, 237), is invalidated by Picard 1993; also cf. Carnap 1937, 162–165. It is not a matter of tautology, but a self-centering cognition: "[E]very successful application of an impredicative model is an abductive act of discovery" (Kercel and Mikulecky 2004, 103).

autopoietically begin in the unconditional, yet determinable world and build up recursions. To discipline itself, religion forms a specific code, which controls the re-entry of distinctions on the one side of the distinction and may include the previous, unspecific differentiations and determine them religiously. So far, the theoretically most plausible and empirically evident candidate for the evolutionary formation of a specific religious code, the differentiation transcendent/immanent comes into question (Pollack 1995; Luhmann 2013a, 40–82; Kleine 2012, 2016). Formally speaking, this distinction is at work in communication in general and—as a second-order distinction—in religion in paricular. Both societal communication and religion are a matter of transcending—not just, and indeed with regard to the history of religions, generally not at all in the sense of the Christian-Western temporal and spatial symbolization of transcendence, but in a universal, modal-theoretical and epistemological sense, namely as the reference to something not in the sphere of experience of here and now. This is due to the transcending character of language as the elementary medium of communication (Rentsch 2003). And this may be the highest common denominator of what philosophical anthropology (especially Helmuth Plessner [3]1975), the socio-phenomenologically oriented sociology (Alfred Schütz 1932, 109, Peter L. Berger and Thomas Luckmann 1966, 1967 as well as Hans-Georg Soeffner 1991, 2010) and the pragmatic theory of religion (Joas 2008) understand by the term transcendence. But social systems, too, have an "immanent transcendence of perception" (Luhmann 1971, 31). Based on this general conceptualization, there are many ways of transcending apart from religion: sign processes in general, history, sociality (the consciousness of alter ego), ideal perception of order, future, dreams, surprising events, the arts, etc.[32] If one does not distinguish between the principle of transcendence in general and its religious characteristic as transcendence of transcendence[33], then everything outside one's immediate experience of the here and now is religious, or to use the German idiom: *'All cats are grey by night'*.[34]

With regard to the empirical data, it makes sense to distinguish the kind of reference to transcendence called religion from other kinds in the following man-

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32 Thomas Rentsch (2015) distinguishes the following dimensions of transcendence: ontological and cosmological transcendence, human existence, as well as language.

33 On various occasions, Matthias Jung justifiably referred to the necessity of this distinction during his time as a fellow at the *Käte Hamburger Kolleg* "Dynamics in the History of Religions between Asia and Europe", situated at the Center for Religious Studies at Bochum University, Germany. For this purpose, cf. the discussion about the Axial Age (Schwartz 1975; Eisenstadt 1986; Árnason, Eisenstadt and Wittrock 2005; Bellah 2011; Bellah and Joas 2012).

34 This, for instance, is the case with Luckmann's concept of the "invisible religion" (Luckmann 1967) – however, even more with its adoption, in which football, body building and so on are supposed to be religion.

ner: religion has to deal with the question of how to designate transcendence, which, in principal, cannot be represented in normal experience, with immanent means—i. e. how the absent can be transformed into the present, the unavailable into the available, the not depictable into the depictable or, by means of the theory of communication, the unspeakable into the speakable.[35] This way, religion manages the task of "transferring the indeterminacy and the indeterminateness of the world horizon into determinacy, or at least into approachable determinability" (Luhmann 1972, 11). Hence, the religion-specific distinction transcendent/immanent is systematically tied to the societal function of ultimately coping with undetermined contingency. The special feature of religion only consists in the combination of both determinative elements, and, in turn, the coping with undetermined contingency and the distinction transcendent/immanent are exclusively designated as religious in the systematic connection.

To make transcendence, which is unavailable in principal, available is, of course, paradoxical[36] and—more permanently—unachievable. Mysticism, for example, is a form of religion that again and again draws attention to this paradox (Luhmann and Fuchs 1989). Following the tendency towards transcendence, religion would have to completely volatilize itself so that consequently—in any case "as an eminently social thing" (Durkheim [1912] 1995, 9)—it would not exist any longer, and society would not have a form of ultimately coping with undetermined contingency at its disposal any more. Religion can internally develop and support itself in societal communication by designating transcendence with immanent means. The necessary tropical character of religious communication results from this. The main reason is that the transcendent (the absent—in whatever semantic designation), which religious communication refers to, is not communicable itself and therefore needs to be designated with immanent (known, present) means. In religious communication, issues that are said to be new and different (e. g. subjective perception that cannot be communicatively covered with established schemes of experience) are made communicable with recourse to the known, i. e. the unfamiliar is translated into the familiar. This way, religion can take topics from the social environment and label them with specific religious sense. Religion treats the problem of how to transform the unobservable (i. e. indistinguishable) into something observable (i. e. determinable). Following Luhmann 2013a, 24, I locate "the source of the problems treated as forms of religious meaning and exposed to evolution in this domain of unobservability

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35 Cf. the Christian-theological distinction between *apophatic* and *cataphatic* (regarding images see Karahan 2013).

36 Therefore, the term transcendence itself is also "a highly paradoxical notion" (Campbell 1982, 148).

where observation and the world (as a precondition of observation) cannot be distinguished (in the 'unmarked state'). [...] Religion has to do this with the inclusion of the excluded, the presence of an absence that is first objectified then localized and universalized."

Besides topic-based differentiation, *situational differentiation* occurs within religious evolution. It brings along an initial self-specification of religion. This means that religious communication proceeds under certain spatio-temporal conditions. Religion binds itself to certain places and times, within which intensive religious experiences are communicatively addressed, evoked, and updated. This is the beginning of rituals and ritual complexes in the form of cults. Religious rituals are the earliest form of religious self-centering and still belong to this very day to religion's most constant forms (Durkheim 1995; Rappaport 1999). Ritual communication consists of temporally and/or spatially exceeding a liminality (Turner [1969] 1977) as well as of jointly and reciprocally observed perception of objects, bodies, and events as "quasi-objects".[37] Quasi-objects are structural links between religious communication and its mental, organic, and physical environment. For religious communication, the communicatively addressed material side of quasi-objects serves as a "material anchor" (Hutchins 2005). Quasi-objects are a functional equivalent for narratives that are to be remembered, serve as additional safeguards of remembrance, or help to generate narratives. Religion remains strongly and situatively bound, if it depends on cults, but one can clearly distinguish religious and everyday relevant contexts in situational differentiation: If the oracle has bad news, the world of gods must be propitiated via ritual; if one does not have the tools for performing the ritual at hand, one needs to procure them.

By establishing self-referential religious rituals, there develops a need to reform the other-reference. It is covered by the development of narratives (in research mostly called myths[38]). The formation of narratives is stimulated by

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37 A quasi-object "is not an object, but it is one nevertheless, since it is not a subject, since it is in the world; it is also a quasi-subject, since it marks or designates a subject who, without it, would not be a subject" (Serres 1982, 225).

38 Then also a differential term for 'myth' should *synchronically* be available. The term λόγος cannot yet be used for it; the explicit distinction between μῦθος (myth) and λόγος (logos) becomes only apparent during Classical Greece; cf. Burkert 1979, 3: "Every tale has a basic element of *póiesis*, fiction. ¶ Myth, then, within the class of traditional tales, is nonfactual storytelling. This keeps us close to the sense of the Greek word *mŷthos* as contrasted with *lógos*: *lógos,* from *légein,* 'to put together', is assembling single bits of evidence, of verifiable facts; *lôgon didônai,* to render account in front of a critical and suspicious audience; *mŷthos* is telling a tale while disclaiming responsibility: *ouk emòs ho mŷthos,* this is not my tale, but I have heard it elsewhere. Just by disregarding the question of truth one may enjoy myth, or wonder, and start thinking." The same

ritualization. They are "a semantic construction parallel to a boundary that must be (ritually) performed as a 'liminal phenomenon'. It was a guideline for differences that can then be used in narratives in order to contrast present time and the reason for the ritual with something else" (Luhmann 2013a, 136). Narratives are part of the formation of religion as a societal subsystem differentiating itself from its environment: "the identity of a traditional tale, including myth, independent as it is from any particular text or language and from direct reference to reality, is to be found in a *structure of sense* within the tale itself" (Burkert 1979, 5). However, religious narratives are related to the other-referential environment, which religion gains its semantic energy from, and transfer it into system-relevant information. This happens via distinctions such as cosmos/chaos, birth/death, origin/presence, abundance/lack, immortal/mortal, pure/impure, soul/body, sexless/sexual, gods/titans or heroes—or more generally: continuity/metamorphosis. Narratives gain relevance, if self-referential religious communication becomes in need of meaning within the communicative environment; i. e. the performance of religion and/or its societal function becomes questionable for other social systems and the society, respectively. Narratives contain ascriptions of events to supernatural and human actors in the shape of actions as well as the sequential passage of time and therefore facilitate the formation of analogies, notably transmitting „the wisdom of myths in situations of daily life" (Luhmann 2013a, 136). This process equals the output 2 of the modeled system described in the system-theoretical chapter (cf. Figure 1, p. 12). The output of narratives serves as the starting point for further system-internal processes of religion, or is released into its environment, where it can be taken up as an offer of meaning (e. g., by the political system, or by psychic systems). The fact that rituals belong to the self-reference of religion and narratives to its other-reference explains why the perfomance of rituals, though not fixed, is rather norm-oriented and redundant, whereas narratives (including the explanation of rituals) are rather abundant in variation, "because it would not make sense to standardize environmental circumstances that could not be influenced" (Luhmann 2013a, 137). The evolutionary advantage of self-referential situational differentiation in the shape of rituals for religion is based on the opportunity to bind itself to places and times, without having to primarily orientate itself along topically varying environmental conditions.

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applies for other terms opposed to myth, such as ἰστορία (history) and ἐμπειρία (empiricism). The meaning of the term myth is derived from these later terms. However, the epistemological value of scientific theories of myths is not denied by this (Segal 2010).

The coordination of other-referential topic-based differentiation and self-referential situational differentiation causes a deeper need for institutional regulation. The more transcendence becomes thematic, the higher the need for mediating the two sides of the emerging distinction between transcendence and immanence, as well as the need for social regulation of what can be regarded as transcendent is. This need is first satisfied by the formation of specific roles. With increasing *institutional differentiation*, redundancy and variance must equally be secured ritually and narratively. Rituals are made flexible by narratives, and narratives are specified by ritual performance. Religious roles especially are responsible for this (in relevant literature called, for instance, sorcerer, shaman, priest, manticist, prophet, master, or founder of a religion). The evolving religious system establishes a double distinction via this form of social differentiation: between role (self-reference) and person (other-reference) as well as between specifically religious roles (self-reference) and differently attributed behavior (other-reference).[39] This double differentiation is evolutionary successful, because variance and redundancy, flexibility and stereotype can be equally ensured this way. Furthermore, institutional differentiation enables the accumulation of religious forms; for instance, prophets evolve from trance states, cosmology refers to the distinction between the visible and the invisible to accommodate the world beyond in this word, too, and narratives affect, in turn, organizational change[40].

Moreover, reinforced *medialization* (including especially image- and text-based medialization) leads to the synthesis of action roles and narratives as well as cosmological programs. This happens, for instance, after the introduction of writing, in text-ritual-complexes or in text rituals. In this respect, texts function as more than mere ritual manuals in the sense of instructions for a ritual practice that is based on physical behavior with reference to objects. In fact, reciting and reading of respective texts themselves may function as ritual. In this case, ritual experts become literary actants as part of the plot structure of the text. From there, it is not far to the formation of religious doctrines and respective teachings so that ritual behavior, cognition, and everyday life can be coordinated with each other.[41]

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39 However, these distinctions, to the best of my knowledge, are reflected in religious self-description only much later, particularly—with regard to the European history of religions—during the Donatists' controversy (first phase: 312–337 CE): "The 'strength' (*potestas*) of the sacrament comes from God, the bishops of the church perform the action (*ministerium*)" (Mühlenberg 2011, 427). The Council of Constance (November 5th, 1414 to April 22nd, 1418), opposed to John Wyclif and Jan Hus, reaffirmed the conviction that the administration of a sacrament is valid regardless of the moral disposition of the person administering.

40 For modern conditions, cf. Creed, Dejordy and Lok 2014.

41 This path is followed, for instance, by the compilation of the Book of Leviticus as part of the *Pentateuch* of the Hebrew Bible. Although it contains instructions for rituals, it is "not primarily a

With increasing organization, the religious system must refer to non-religious activities, include them into the system and designate them with religious interpretation; for instance, matters of administration, physical structures of buildings, exchange of services (later payments), coordination of personnel, and certain societal relations that are, however, external to the religious system. The system is now based on a twofold systemization, i. e. in both a sociostructurally and semantic regard. It arrives at a state of "double closure" (Luhmann 2013a, 139 referencing Foerster [2]1984, 305), with a restabilized system differentiation as a consequence. "On the one hand, the operations were determined in view of the current state of the system and of their capacity to connect with the system. On the other, their orientation derived from a construction of the world aligned with the system. There transitions were carefully monitored, and inconsistencies were avoided (if possible) or depicted as merely ostensible contradictions" (Luhmann 2013a, 139). Consistency is achieved by no longer facing opposites such as chaos/cosmos, death/birth, light/darkness, etc. as paradoxes, but including them into a unifying cosmology. This leads to initial approaches of dogmatics, which does not limit religious cognition to only other-referential narratives any more, but rather forms reinforced self-referential concept complexes in difference to everyday life experiences. Besides ritual-oriented behavior, religious cognition also gets into the side of self-reference, which, in turn, reinforces the differentiation of religion.[42] By intensified system formation, religion draws its own boundaries between itself and its environment. In this condition, religion by means of self-observation, and regardless of externally given topics, situations and roles, starts

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book for priests. It is not a priestly manual, and it does not seem to have priests as its target audience, though priests were no doubt a *part* of the intended audience. [...] The primary message of Leviticus seems to have been theological. [...] the writer of Leviticus wanted to express himself about conduct in the individual's daily life, and conduct with regard to ritual purity and cultic regulations was parallel to what we might call moral and ethical conduct" (Grabbe 2003, 221–223). The Book of Leviticus is embedded within the compilation of the *Pentateuch* in the Sinai narration complex (for the relationship between narratives and ritual descriptions in Leviticus, see Bibb 2009). The core of Leviticus is chapter 19 (Douglas 2000, 228f.239f.) with the central commandment in verse 18: "[...] you shall love your neighbor as yourself: I *am* the LORD" (*Scofield Study Bible III* 2002, 178). This way, "cultic institutions and the encounter with YHWH [...] are transposed from their historical space to the 'text space'" (Liss 2004, 23). (It is yet another question whether we can refer from the textual space to the historical space.) For reading as (sublimed or substitutive) sacrificial ritual, cf. Erbele-Küster 2014. I owe this example to lectures of and chats with Jim Watts during his time as a fellow at the *Käte Hamburger Kolleg* "Dynamics in the history of religions between Asia and Europe".

42 However, the self-centering of specific religions and therefore segmental differentiation of the religious system are forced at the same time, which until today—despite some attempts of respective dialogue initiatives—prevents a formation of uniform religious semantics.

to make decisions itself concerning the question, which operations belong to the system and which are not part of it (Figure 4). With reinforced coordination between other-reference and self-reference, something occurs, which organization theory likes to call "uncertainty absorption"[43]: Other-referentially oriented narratives and cosmologies draw certain conclusions from the environment of the evolving religious system. However, self-referentially directed rituals and other religious institutions then no longer base their follow-on operations on the other-referentially perceived issue, but rather only on the conclusions that are drawn from narratives and cosmologies. In the restabilized state, religion proceeds under the condition of system-internal epistemic openness but is operatively closed towards the environment. It emancipates itself from direct external determination of its *eigenstate* and only engages in such structural couplings with its environment „that channel those disturbances (and exclude others) that are treated as irritations in the system and thus reworked into manageable information" (Luhmann 2013a, 141).
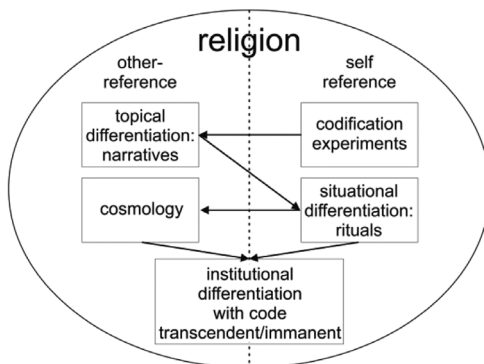

Figure 4: Differentiation mechanisms of religion

By stabilizing via semantic and social differentiation in the form of cults, roles, and narratives coordinated to each other as well as cosmologies, it becomes possible for the religious system to systematically distinguish between variation and selection and to coordinate those two evolutionary mechanisms. In this evolutionary condition, however, the religious system does not manage to sys-

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43 Cf. March and Simon [1958] [2]1993, 165: "Uncertainty absorption takes place when inferences are drawn from a body of evidence and the inferences, instead of the evidence itself, are then communicated."

tematically separate selection from restabilization. First, this is because religions of advanced civilizations provide the society with a complete description, which makes it difficult for the society to acknowledge and communicatively process the differentiation of religion. "Society accepted religion's positing of the world [*Weltsetzung*]" (Luhmann 2013a, 142). Second, religion in this condition is oriented by the principle of stratified societal differentiation, which is situated transversely to functional differentiation. Then, religion interacts with other societal domains (particularly: politics, law, economy, science, education, health, and arts), within which selection and system stabilization are intertwined in many ways; for instance, with regard to politics as the ruler cult in the ancient world (Brisch 2008) and as relation between *imperium* and *sacerdotium* in the European Middle Ages[44], with reference to the arts in the financial patronage of artistic production (Russell-Smith 2005), concerning health as strong interaction between and partially as symbiosis of, ritual and medical techniques (Csepregi and Burnett 2012; Zysk 1991; Stanley-Baker 2012) as well as in the case of education as influence of religious educational institutions (cf., for instance, Christian: Wood 2005; Muslim: Pedersen and Makdisi 1986). The lack of systematic differentiation of selection and destabilization is not only but significantly due to the fact that religion for a long time is directed along and embedded in the two most important collective forms of segmented and stratified societal structure: in the political community (*polity*) and in the family/kinship/clan (Malina 1986).[45] Religion only achieves the systematic differentiation between selection and restabilization as soon as it orientates itself based on the principle of functional differentiation (and possibly is stimulated to do so by environmental adaption).

If the three pairs of differentiation mentioned in the system-theoretical chapter (sacred/profane, transcendent/immanent, and religious/secular) are related to the theory of societal differentiation, we are able to realize the following correspondencies:

– The ascription form of *action* (above all ritual) proceeds within the distinction sacred/profane and corresponds to topic-based, situational, and role differentiation of archaic and advanced societal structures.
– The ascription form *knowledge* as cognitive differentiation rationalities of various social domains corresponds to stratified societies—in cases where

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44 Although functional differentiation has already been implemented in this distinction; for the respective discussion, see Pollack 2013a, Althoff 2013, Steckel 2013 und Pollack 2013b.

45 Also cf. Luhmann 2013a, 156: It is notable "that traditional religious semantics worked to a considerable extent by deriving its plausibility from nonreligious sources, something that succeeded into the modern era. The major examples refer to the family and/or clan structure as well as to political rule."

religion occurs as system formation based on the distinction transcendent/ immanent.

– The ascription form *experience/attitude* as behavior of persons towards the rationalities of societal subsystems under the condition of reinforced attribution to persons (individualization) within the functionally differentiated society—in the case of religion as faith and subjective experience in contrast to differently determined convictions and experiences.[46]

However, the analytically differentiated dimension of acting, knowledge and experience/attitude cannot be pulled apart to such extent that the respective components find themselves isolated from one another. Knowledge, acting and experience/attitude as different forms of communicative attribution reciprocally refer to each other in socio-cultural reality. Accordingly, religion in its pronounced form also consists of the interplay between knowledge, experience/ attitude, and action provided with religious meaning—and not least the recourse on media and materiality, which as well can be provided with religious meaning.[47] Regarding the relation between knowledge and action, various determinations of the relation between narratives, doctrines, and dogmas (knowledge) as well as ritual and the conduct of life (action) are relevant in the history of religions. Concerning the semioticization of materiality, it is of particular importance whether objects are instrumentally (other-referentially) used as media *in* religious communication or whether they receive a religious meaning themselves, i. e. function *as* religious media (self-referentially)—as in the form of the concept called fetish, or in the case of image-related communication as unity of the depicting and the depicted[48]. The analytical pattern of the attribution forms of knowledge, experience, materiality, and action may help describe the various figurations of differentiation (including its absence und de-differentiation) and coordination of the three evolutionary mechanisms of variation, selection, and (re)stabilization.

The words written here, when read, are a part of communication—even though they may be assessed as nonsense and rejected. Therefore, the combination of the system-theoretical description of religion and the theory of religious

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46 However, it would be a false reductionism if the societal meaning (function) of religion would be referred to the aggregated extent of attitudes of persons *towards* religion as a societal subsystem; cf. Krech 2016b.

47 For media, see Hoover 2006, for materiality, cf. Morgan 2010 as well as Houtman and Meyer 2012.

48 In the case of the Hindu-religious complex, cf. Eck ³1998, and for the Byzantine image controversy, see Brubaker 2012.

evolution is to be integrated in a communication-theoretical framework. This is the only way the performance conditions of the research program as well as of its object can be considered. Therefore, the next chapter is devoted to the communication-theoretical framework.

5 Communication-Theoretical Foundation of Systems Theory and the Theory of Evolution

5.1 General Communication-Theoretical Considerations

"What happens in the heads of the uncountable individuals can never build up 'religion'—except through communication" (Luhmann 1998, 137). Imagination, experiences, and actions of individual persons become only religion through utterance that generates follow-on operations of communication, through socially ensured ascription of something as part of the domain that is determined by the code transcendence/immanence. The terminologically reflexive, metonymically condensed, ascription is religion—including family resemblances of this term and respective attributes (Kleine 2010). Religion is a genuinely communicative matter. Equally, as language itself is not the sum of some phrases of people, religion does not evolve and perform in intersubjective communication, negotiation, or agreement.[49] It is rather socially generated and adopted by psyches through socialization and learning. The addressing of the organic and physical environment as religiously meaningful is also a matter of communication. A religious event, a religious theme, a religious object, a religious time, a religious space, a religious action, and a religious experience do not exist as such, but only in the respectively communicative determination (Taves 2009). Religion unfolds within the communicatively evolved and communicated distinctions between inside and outside (as the founding structuring of the semantic space), between the before and after (time) as well as between ego and alter ego (society) (Luhmann 1995c, 74–82).

From the communication-theoretical perspective, the epistemology of religion (as *genitivus subiectivus* and *obiectivus*) needs to be newly designed. First, it is not about the communication from human to human, but about communication, which, in the self-description, largely originates from transcendent beings

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49 For arguments against the concept 'negotiation' in discourse analysis see Link (2005). I owe this reference to Tim Karis.

and powers and addresses these, which, however, need to be communicated and depicted with immanent means. Second, religious communication itself comes to the fore instead of communication between actors (according to the sender-receiver model). Religious communication includes persons but addresses them in various ways (Kippenberg, Kuiper and Sanders 1990). Therefore, persons, including their experiences, intentions and motifs, are not the starting point, but one among many forms of attribution of religious communication. "Not motifs explain societal differentiation, but societal differentiation explains motifs. Particularly in the case of religiously qualified motifs, nothing else applies" (Luhmann 1989, 344).

Based on the boom of action-theoretically directed approaches within the social sciences, it has become especially common to emphasize on the analyses of actors as well as their interests, motivations, and intentions within the fields of philology and cultural studies in general as well as within the study of religion in particular. The question is, though, who and what counts as an actor, and under which circumstances is which event socially attributed to whom or what. From the perspective of the approach represented here, which primarily conceptualizes communications as events, which are out for communicative follow-on operations, it is not self-evident that the social attribution of the actor's status is exclusively implemented on individual persons or collectives of persons. Michel Serres, Bruno Latour, and others justifiably draw attention to the fact that concepts and objects can be 'quasi-subjects' in communication. Therefore, on the contrary, individual and collective actors can be 'quasi-objects' in the sense of Michel Serres 1982 und Bruno Latour 1993.[50]

In order to understand religion scientifically and to not only paraphrase it, advancing underneath the surface of the subject-object differentiation is due and to put the focus on the communication processes themselves.[51] A specific communication event constitutes an autonomous entity and generates a scope with the possibility to communicatively address events or parts of them as actions of actants. Actants are thus not the starting point for events, but a communicative product. The metalinguistic concept of agency refers to this. To understand communication as an autonomous agency means that it does not work out in the mere aggregation of individual expressions related to each other by individual

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50 A quasi-object "is not an object, but it is one nevertheless, since it is not a subject, since it is in the world; it is also a quasi-subject, since it marks or designates a subject who, without it, would not be a subject" (Serres 1982, 225). For interactions between humans and objects from an archaeological perspective, see Hodder 2012.

51 This is difficult within natural language, which proceeds in some order of subject, predicate, and object and can therefore only be carried out suggestively by means of metaphors.

actors. "If reproduced autopoietically though recursions, communications form an emergent reality sui genesis. Human beings cannot communicate; only communication can communicate. Like communication systems, consciousness systems (and brains, cells, and so on, on their other side) are operationally closed systems that can maintain no contact with one another. There is no nonsocially mediated communication from consciousness to consciousness and there is no communication between the individual and society" (Luhmann 2012, 57f.). This view is not only but especially relevant for the study of religion, because something very often happens in religious communication which, in the self-description, is not or at least not primarily and exclusively attributed to human actors. In the religious domain, one finds superhuman spiritual forces and beings (Tylor 1871, 5; Spiro 1966), including ghosts, demons, goddesses and gods or one single god, who are considered to act. If these were pure projections from consciousness (Feuerbach, Marx), one could not understand how the vigorous imaginations of different consciousnesses could get together. The metaphor of negotiation, taken from economics, or the metaphor of agreement, taken from law, contradict religious self-description and do not suffice to explain its scientific reconstruction. How should issues be negotiated or agreed upon that refer to the unconditional and ultimate?[52]

The perspective taken here does not exclude the consideration of human actors as forms of attribution but does not reduce the processes to them. Assuming an organic-mental-social unity called 'human being', the focus of communication in its autonomy gets lost while evolutionarily formed boundaries between mental, organic, and social processes are blurred. Moreover, the focus on processes of the negotiation of interests of individual actors reproduces all too often only object-linguistical semantics outside the religious and therefore prevents the possibility of analyzing religion. The "atomistic paradigm of sociality", according to which sociality is conceptualized as the mere aggregation of single actions of single actors in contrast to a "relational approach" (Simmel 1989, esp. 130), enjoys great popularity within the study of religion, but contains above all epistemic aporia. This is because what is semantically and sociostructurally addressed as 'human', varies immensely contextually, historically, and in different cultural settings—not least in the history of religions (Kippenberg, Kuiper and Sanders 1990; Assmann and Stroumsa 1999).[53] It is therefore questionable what is

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52 It cannot be excluded that there is something partially negotiated within religious communication; e. g. Abraham in Genesis 18, 16–33 tries to negotiate with God when faced with God's intention to destroy Sodom and Gomorra. But his attempt at negotiation is embedded within a narration.

53 Regarding the construction of 'actors' in modern society see Meyer and Jepperson 2000.

meant by 'human actors', and consequently, they cannot be made the starting point of scientific analysis.[54] Moreover, an "atomistic paradigm of sociality" leaves no space for the *agency* of religion; from this perspective, religion can only be structured as the mere imagination of actors (and from there it is not far to arrive at ideologically-critical 'exposure' of religion) or as an anthropological constant[55] (then, all people, who do not understand themselves as religious, must be missing a constitutive mode of human existence). Possibly, it is not a matter of the study of religion, but rather of the 'study of humans'.[56] When in scientific description attribution is primarily or even exclusively directed to 'human actors',

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54 What Kurt Röttgers 2012, 16f. writes about anthropologically based social philosophies applies for every scientific approach that intends to make 'the human being' its object: "Social philosophies that attempt to proceed from the 'human' perspective, get in trouble by doing so. They first need to clarify what this 'human' is. Is it a subject or object of a practical humanism, i. e. a unit of attribution, and who is then, and on what basis, entitled to apply such an attribution? The only remaining, but circular answer is: This is the human. Or is this the human which medical doctors or even bio-politicians are responsible for, i. e. finally the human who is an organism determined by a certain genetic pool? Or shall we understand what a human is by what philosophical anthropology invented 200 years ago, as Gehlen suggests, a creature of deficits or to express it with Plessner, an eccentric? Even assuming that the anthropological and humanistic presuppositions were clarified, and even the moral perspective, whether man is by its first or second nature good or evil or mixed like a chessboard, it still remains unclear how something social or even an entire society can be traced from such a constructed human (the constructed idea of man)."

55 In the sense of a religious *a priori* – for instance, as with Rudolf Otto [4]1920, 205 and Ernst Troeltsch 1913 – or a genetic predisposition (Grinde 1998). A genetic predisposition cannot be clearly evidenced in comparison with socio-cultural environmental factors. Genes may moderately affect individual religiosity, but they are in no way more important than socio-cultural influences; for an overview and study, cf. Lewis and Bates 2013.

56 Cf., for example, Robert Campany 2003, 319: "Religions do not exist, at least not in the same way that people and their textual and visual artifacts and performances do. And when religions are metaphorically imagined as doing things, it becomes harder to see the agents who really and non-metaphorically do things: people." Accordingly, Steffen Führding 2015, 12f., partially referring to Peter Antes 1979 and Manfred Hutter 2003, talks about "an extensive consent of [...] that post-phenomenological science of religion is an empirical and humanistic discipline [*humanwissenschaftliche Disziplin*]." The reference to empiricism should be natural, but it remains unclear to me what a "humanistic [*humanwissenschaftlicher*]" starting point should be, and why "people" are "real" and "non-metaphorical". Whereas I share the presumption of Wolfgang Gantke 2015, 39: "Perhaps a new openness is then only reachable for the phenomenon of the holy if the still prevailing 'human-egoistic anthropocentrism' is overcome beforehand." However, this view does not necessarily require a revitalization of the phenomenology of religion, as is the case in Gantkes argument. From the perspective of the sociologically oriented study of religion, the holy is the result of a communicative attribution and therefore a genuine socio-cultural issue (Schlette 2009).

differentiation processes and relations cannot be focused on; neither those between socio-cultural reality and externalized nature nor those between societal subsystems with different system rationalities. What is addressed as a human being is always an amalgamation consisting of numerous and various systemic processes—of physical, chemical, organic, and psychic processes within the social environment.[57] From a sociological perspective, persons are entities of attribution of societal subsystems and social forms (Luhmann 1995a). Humans belong to the environment of society; if addressed with a focus on other-reference, they are each a bundle of role differentiations—or in the words of Georg Simmel 2009: "the intersection of social circles"—and become thematic only under certain aspects.

These considerations have important consequences for the scientific description of religion. The inner logic of the religious is not congruent with the interests of political power, with class-related status (such as age, sex, economic situation, ethnic and cultural belonging, etc.), economic profit, technical coping with everyday life matters, and so on. It does not even produce intersections with the issues mentioned above—unless the respective features become parts of religious communication and are transformed into religious meaning. Furthermore, it is not always clear within religion who or what is subject and object of the happening.[58]

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57 One must "come from various emergent levels of the order structure of reality [...] which so to speak cut through the human being" (Luhmann 1995b, 271). Therefore, "[t]he only option is to regard human beings in their entirety, body and soul, as part of the environment of the societal system" (Luhmann 2012, 9). In this sense, Peter Fuchs 1992, 12 argues: „It is therefore possible, based on prerequisites still to be clarified, that a human being in the environment of religion, economy, law, politics, arts, education, family etc. operates successively as the same human being, whether coming from a religious service, selling arms, closing the deal, supporting the education of foreign children at the local association of his political party, and having completed these actions, goes to a gallery, and then, mentally refreshed talks on the phone with the pedagogically passionate teacher of his daughter about the problems of education, and finally talks about today's routine with his wife in the code of intimacy. *But it is not possible*: that he generates a higher price for his arms considering he is a believer, that he can make the education of foreigners a law considering he sells tanks, that the gallery will donate a picture to him since he is a father or that the teacher allows his daughter to skip a grade because the father is a good husband."

58 However, Gerardus van der Leeuw [1933] 1986 seems to know this when he deals with "the object of religion" in the first part and "the subject of religion" in the second part of his phenomenology before he turns towards the "object and subject in their reciprocal operation" in the third part. Whereas, according to Peirce, religion is neither subjective nor objective (Topa 2007, 335). Stefano Cochetti 1999, 244f. argues in reference to the theory of sacrifice by Georges Bataille: "'Transcendence' and 'immanence' imply no hierarchy: a human being transcends a table as well as a table transcends a human being." Cf. also Luhmann 2013a, 12.30: "Religion cannot be adequately understood according to the schemas of consciousness (subject/object,

In order to understand religious communication, the subject-object scheme must be left behind and the operating mode of semiosis taken into consideration, which is dealt with at the beginning of the second part of this article.

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observer/object) because it is located on both sides of the distinction between self- and other-reference. [...] Yet this is the source of religion's problem, if only because religion can—and finally must—ask about the meaning of this subject/object distinction."

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