Luhmann`s Life Work and Tier Patterns:
The Analysis of Differences and Contingent Patterns

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Abstract: The article undertakes an archeological investigation into the writings of the German Sociologist and cybernetic Systems-thinker Niklas Luhmann. His writings spanning almost four decades of uninterrupted stage growth and text production are good fodder to dissect ruptures between and plateaus of semantic-syntactic structures called developmental stages. By this an architecture is exemplarily revealed that spans four Tiers including sixteen Stages with four subphases at each niveau of relative stability which sometimes is called Center of Gravity. The article is structured as an oscillation between genetic and structuralist phases that enrich Luhmann`s Life Work by multiple references to other thinkers at the integral and post-integral stages. The final section that then presents the complete model is also a critique of other developmental models specifically directed towards and suggesting critical revision of Terri O`Fallons STAGES model. This happens through introducing four common fallacies developmental models commit, when trying to appropriate the transcendental and phylogenetic realm preconditioning our conscious growth, through the contingencies of our very self-referential and themselves-thematizing observations. Additionally, in discerning between genesis and structure, descenders and ascenders, inside and outside perspectives and ultimately an Aristotelian and an Platonist Type of stage growth it is the attempt of a seamless intervention between both modes, uniting them and ultimately deluding them of their most prominent errors: the necessity of a first distinction mistaken for the creator and their ultimate purpose mistaken for the divine.

Keywords: Archeology, ego development, Nicholas Luhmann, semantics, text analysis, universal grammar.

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Introduction

Basic Structure

The following article will offer a developmental view on Niklas Luhmann`s work. Luhmann was a German sociologist and social theorist. He is considered to be the most important German-speaking representative of sociological systems theory and socio-cybernetics. We will follow him through ruptures in his life and writings in an attempt "to establish, between so many different changes, analogies and differences, hierarchies, complementarities, coincidences, and shifts: in short, to describe the dispersion of the discontinuities themselves", as Michel Foucault (1972, p. 175) lays down in his *Archeology of Knowledge.* However, despite Foucault`s doubt of deploying "two heterogeneous stages on either side of a split" (ibid. p. 175), these ruptures in Luhmann`s life and writings will be related to a linear sequence of stage growth.

This procedure is promising in at least two differential but interrelated ways, when it comes to improve adult developmental theory and its measurement: a) it will give more granularity to single stages by showing repeating patterns within the dispersion of discontinuities and b) by following these repeating patterns of differences and similarities and the related ruptures further differentiates within what Susanne Cook-Greuter (2010) called post-autonomous ego-development. These repeating patterns stem partially from the examination of Terri O`Fallon`s work and the attempt to dynamically deconstruct and reconstruct it within the written expressions of common people and famous Authors` lives. The pattern shows a more than accidental overlap with those used by Terri O`Fallon (2013) in her reframing of and expansion on Jane Loevinger`s and Susanne Cook-Greuter`s work. However, the trajectory finally revealed seems quite distinct and the application of a quadruplicate pattern – as will be shown – rather part of late stage consciousness than an individual or unique approach to structuring reality.

The article is divided in several sections. Starting with an introduction into the foundations of ego-development theory and showing how research into literature can help improve the granularity of sentence completion tests, we will go through the writings of Luhmann in a linear and chronological as well as nonlinear and comparative manner and show the dispersion of discontinuities. We look at all his books up to the 1970s and then restrict ourselves to the major ones and those which mark transitions. Intertwined with this we will show repeating patterns display themselves. They will be related to sequences in language development and hierarchies of grammar. During this process cross-references to Susanne Cook-Greuter`s and Terri O`Fallon`s work will be given to correlate the sequence with their models as best as possible as well as to other developmental psychologists and authors from social sciences or philosophy to illustrate seeming parallels. Central for this cross-referencing are Georg Wilhelm Friedrich Hegel, Sri Aurobindo, Charles Sanders Peirce, Ken Wilber and Lawrence Kohlberg. A final section will offer insights into the Tier Structure of development which stems directly from Luhmann`s work and matches that depicted by Hegel, Peirce, Aurobindo and others and how this tier structure can be correlated with Terri O`Fallons theory of stage development.

Our goals include the suggestion of heuristic principles for the grammatological analysis of text, first in an introductory fashion and then at larger granularity applied to determine the grammatical complexity of written texts. As a supplement and expansion of text scoring based upon a catalogue of examples that are matches against individual's expression to determine a

level of development as done by Cook-Greuter and Loevinger we propose grammatical and logical properties of text as more fundamental indicators of developmental complexity. This might lift grammar and logical complexity from being a palate cleanser in Ego-Development theory where it only exists as an assumed precondition for development, serves when sentence completions cannot be matched to a pre-categorized exemplar and appears as rough patterns in pre-categorized examples towards being a main ingredient for pointing towards a person developmental center of gravity in a domain general fashion or independent of different line based assessments of consciousness's maturity. Furthermore, it expands the scope of analysis from standardized sentence completion tests with a fixed number of verified items for instance towards the analysis of literary texts. It will also allow for a deeper exploration and understanding of the nature of this development by providing both a more fine-grained tool and an overarching superstructure that is at the same time a set of transcendental categories that underly a subject's linguistic operations.

This parallels the attempts of O`Fallons model, which also moves away from exemplar-based scoring to focus on the structure of language rather than its content, the specific categories of exemplars used by Loevinger and Cook-Greuter. As said, we will propose repeating patterns that underly the sequence in which developmental levels unfold as tiers of increasing grammatical complexity, and these patterns partly overlap along the explored trajectory with these used by O`Fallon. Thus, despite the many difference highlighted, our method may also productively used to refine and extend Terri O`Fallon`s model and scoring method as well as refine and extend Jane Loevinger`s and Susanne Cook-Greuter`s work.

Philosophy of Style

The article is meant as an appropriation to a more Aristotelian than Platonist view. In this orientation we pay credit to the main actor and heroic figure of this article Niklas Luhmann who can - despite several differences and expansions on ancient concepts – be considered to enact an Aristotelian metaphysical approach. By inquiring into the structure of the world, especially that of social systems, he tries to provide a better understanding of reality. Luhmann considered himself a poststructuralist thinker concerned about Autopoiesis, the self-replication and oneness of process and outcome, where nothing is solid but exist through its self-repetition and search for self-sufficiency and self-maintenance through self-narration and reentering into one's own stories and scripts of what it means to be oneself as part of society: a process that oftentimes is argued to be a rediscovery of the Aristotelian distinction of self-preservation that "comprises the complex bodily and behavioral relation of being-organized-toward-a-plan into a linguistic-semantic construct that can be objectivized as if it were a thing: namely, the entelécheia [the Form that realizes itself within a substance] or structure [that] refers, indeed, to the specific dynamic structure of self-organizing systems that preserves themselves" (Álvarez-Vázquez 2016, p. 72).

Jacques Derrida`s (1978, p. 154) statement in *Writing and Difference* that philosophy, and hence science, too, becomes easily "an abusive investigation which introduces beforehand what it seeks to find, and does violence to the physiology proper to a body of thought" seems relevant here. Of course, all we seek to find in this paper is based on the efforts of more than eight years of the author engaging in a thorough search, including avenues with mistakes and progressions within these mistakes, which lead to the living and partly unpredictable thing this article became through writing and which it is meant to become in the eyes and minds of the readers. It builds, besides other papers, especially upon a Master-Thesis about Luhmann, Hegel, Peirce and Stafford Beer (Angerer 2019). However, in being written it reveals newness, surprise and wonder within the author and is supposed to do so in the "we" it addresses

and as that which and within which it writes itself as its each and anytime pre-structured and unique self-revelation. Derrida calls this play, borrowing from Husserl, the problem of structure and genesis. Or we could say of structuralism and accidentalism, of outcomes and solids or underlying ever-presents and processes and fluidity or an above floating presence of the coming and going that reality is. And "in any event, as can be seen, the necessity of this transition from the structural to the genetic is nothing less than the necessity of a break or a conversion" (Derrida 1978, p. 164) where something "differs from itself in order to reappropriate itself" (ibid. p. 166).

As Gilles Deleuze (1998) writes, there is one practical problem to each play or writing or search for understanding. The difficulty of what Aristotle called recognition, wherein an "unknown knowledge must be represented as bathing the whole scene, impregnating all the elements of the play and comprising in itself all the powers of mind and nature, but at the same time ~~the hero~~ [the oneness of the writer and reader as the oneness of that reappropriating and interpreting we] cannot represent it to *himself* [itself] – on the contrary […] [we must] enact it, play it and repeat it until the acute moment […] [where] repetition and representation confront one another and merge, without, however, confusing their two levels, the one reflecting itself in and being sustained by the other, the knowledge as it is represented […] [in the writing and reading] and as repeated by the […] [reader and writer] then being recognized as the same" (Deleuze 1998, p. 15). Genesis or process and structure are intermingled and the differences pointed out reveal the structure and each structure – though it might be timeless, beyond human space, before any individual consciousness and social phenomenon, even before Abraham was born but prefigured in the big bang which set in to disclose creation to itself, while, too, outside of any identity but appropriated as Brahman is appropriated in each Atman through the Ishwara and each energy fed through the aftermath and expansion of the first blink of existence – as its own differences becoming its own differentiated. It is an entering that creates a unity of the writer`s past and personality as its own all with that of the reader`s past and personality and vice versa by travelling the infinite, unbound, unpredictable but precious and with all identical discourse and mind that we all are, however approximate this all and sacred dialogue is in its particular present and pristine self-presence within a single seemingly individual and separate mind reenacting the typo in letters, words, sentences, textuality and finally an understanding.

Thus, this article moves between genesis and structure. By this we are constantly adding and taking away words and information that is reappropriating itself as that "text" and communication that it is meant to be; as distinctions and presence merged in both reader and writer: one follows the other and one within the other endlessly, eternally – drank by one moment of reading and poured out as fragment of the new whole everlastingly. There is no need to understand, though it was written with best intend of braking down the overall complexity and make it comprehensible. What is repeated can enter and what is new becomes a new possible repetition. More genetical phases are followed by more structuralist phases of this article because as Kierkegaard said, "life can only be understood backwards; but it must be lived forwards", so we write forwards and understand backwards, structure not in advance but as repetition that adds the next moment to be repeated.

The Sentence Completion Tests and Review of Literature: The Procedure

Jane Loevinger and Ruth Wessler in 1970 distinguish between four characteristics of the Ego. The Ego, like a gyroscope, is that which keeps these four functions – namely impulse

control or character development, interpersonal mode, conscious preoccupation and the cognitive functioning – in balance. Impulse control and character development relate to "moral development in terms of the basis for moral behavior and the types of moral concerns" (Manners & Durkin 2001, p. 542) as well as goal-orientation. The interpersonal mode "represents the attitude toward interpersonal relationships and the other person, the understanding of relationships, and the preferred type of relationship […] [and] conscious preoccupations refer to the predominant foci of the person's conscious thoughts and behavior, such as conformity to social rules, responsibility, and independence" (ibid. p. 542).

Cognitive functioning for Jane Loevinger (1976) is in a similar fashion as Lawrence Kohlberg (1976, p. 124f) suggested, when he said that "logical development is a necessary prerequisite for moral development, but no sufficient qualification", that which by its increase in complexity may act as a pacer or leading variable for the lagging ego-development. It is the level of conceptual complexity a person has to structure one`s meaning making.

This level of cognitive complexity is especially valuable when it comes to text analysis. It is possible to assess the complexity level of a text and thus the maximum level of ego-development, because as Linda Dawson (2006) points out: a) the hierarchical order of abstraction and b) the logical organization of utterance change with each stage. The discourse analysis here is done to show the patterns behind the reorganization and summation of units like nouns and verbs, phrases and clauses, arising within stages, between stages and across stages.

For reasons of simplicity we here consider with Foucault (1973, p. 63) these grammars as "the preconceptual field [which] allows the emergence of the discursive regularities and constraints that have made possible the heterogeneous multiplicity of concepts, and, beyond these the profusion of the themes, beliefs, and representations with which one usually deals when one is writing the history of ideas". The grammar or logic and level of abstractness of a certain cognitive complexity is in itself a somewhat tendentious apperception, one of the main characteristics Loevinger (1976) attributes to the ego. Thus, it is the ground for each conscious perception, interpersonal mode and character development as a network of different grammatological combinations. It defines a domain of possible objects as it works as a complexity or sophistication threshold for topics a literary or scientific text can contain and is considered causal for the fact that "a thought that arises at one level as a cliché appears in deeper, more convincing and more complex versions at a higher level" (Cook-Greuter 2010, p. 33).

The grammatological web or network thus work like different versions of a television, earlier ones can depict black and white and a highly restricted number of pixels and later ones can show 256 shades of each primary color and thus offer HDTV in 16,7 million colors. The ego in this restricted set of assumptions is basically such a TV infused with conscious perception, and the TV program is the interpersonal mode and forms of impulse control. Like a TV caries electricity as information and moving colorful images, as the medium of a certain form, we can look at ego-development as unified pattern of increasing complexity maintaining a meaningful text.

Our later analysis will span the trajectory from the Expert towards the Unitive stage in terms of Susanne Cook-Greuter, including a further segmentation of the Unitive stage or realm as we will call it, so that the scope expressed in the terminology of O`Fallon spans the whole range from 3.0 to 6.5. In the final section of this paper our reasoning will also include even later stages plus elucidate some aspects of the depicted repeating patterns by including

the very earliest stages of human consciousness so that we span the whole spectrum of known stages as depicted for example by Wilber (2018) from infrared to clear light.

Methodology of Correlation with Ego-Development

Such a meaning carrying text is at least a mix of different types of grammar which collocate a) sentences which are conscious perceptions based on the modal cognitive complexity of a person`s stage (called center of gravity), thus carrying stage typical discourses about the other domains of the ego, b) those with a grammatical superstructure or underlay that expressive specifically of this particular stage (e.g. including typical grammatical variations uncommon on other stages) and certain perceptions only possible to ride on such a grammatical foundation (objects that need a certain complexity of cognition to arise e.g. see Wilber`s (2018) concept of cosmic address), but don`t exhibit the full complexity possible, and c) those which exhibit a movement to another higher or lower level of abstractness and thus drop the center of gravity`s typical grammatological web, or as Aurobindo (2005, p. 992f) puts it: they exhibit a "further cause of complexity arising from the need of integration itself; for the process [of development] is not only an ascent of the soul to a higher status, but a descent of the higher consciousness so gained to take up and transform the inferior nature".

Or differently said, although written texts are – within the scope of this article – considered as the self-expression and self-awareness of a certain stage, they, too, should be considered as webs or networks combining different levels of abstractness. There is a so called Decaláge, as Piaget (1971) called it, the phenomenon of uneven development or horizontal displacement. The post-Piagetian developmental psychologist Kurt Fischer in unison with Aurobindo highlights and expands the idea of displacement with this web metaphor: the "local variation of activity within global order, […] the multi-directional nature of development, including forward progression and backward transitions" (Mascalo & Fischer 2010, p. 163).

Ego development is assessed via a sentence completion test, a "projective" instrument typically containing 18-36 sentence stems, such as "The thing I like about myself is...", that have to be completed. Though sentence completion tests deal with the same dynamic as "people tend to give responses at more than one level" (Cook-Greuter 2010, p. 163f), the assignment of a stage needs a certain number of responses at a stage to assign an overall score to a person – a center of gravity from where one most likely functions in one`s everyday life. Contrary to this the changed grammatical superstructure (points a) and b) from the upper list) a text has, its substance from self-awareness, can support or replace such a procedure of allocating a person a center of gravity based on a statistical rule. So, while the sentence completion test as a sort of free association task leads to answers across various stages the final score is based on only the highest handful of completions since subjects are not expected to be attempting any "best" answers. Apart of that an authored text delivers a certain overlay, points a) and b) from the above list, that besides variations, point c) from the above list, indicates a certain stage the author is writing from.

Besides that, a number of what we called marker-sentences, will show up with each new developmental level, indicating ruptures or discontinuities as well as stable plateaus. Those sentences that demonstrate the highest developmental level. They resemble typical responses triggered through sentence completion tests and thus can be used for attempts of correlation. Table 1 shows such a marker sentence, matching a response from a typical sentence completion item. Both deal with what might be irreconcilable choices at earlier stages and combines them through a "both… and… and reason" construing "conflicting alternatives as aspects of

many-faceted life situations" (Hy & Loevinger 2014, S.22). He or she has a high toleration for ambiguity.

Table 1. Example for a Marker-Sentence for the Autonomous Stage of Ego-Development.[2]

Marker Sentence in Sentence Completion Form:

A good boss… *"is able to balance company and staff priorities, whilst finding a way through the chaos to create a climate in which work is rewarding and successful"*. (Miniard 2002, p. 70)	A good process… *"on the one hand creates basic conditions, which enable it, and on the other requires steps of reciprocal reinforcement of selectivity, to realize trust."* (Luhmann 2015, p. 49)

Labeled Bracketing Form:

[stem A good boss] [choice 1 is able to balance company and staff priorities,] [choice 2 whilst finding a way through the chaos] [reason to create a climate in which work is rewarding and successful.]	[stem A good process] [choice 1 on the one hand creates basic conditions, which enable it,] [choice 2 and on the other requires steps of reciprocal reinforcement of selectivity,] [reason to realize trust.]

For working with marker sentences like in Table 1 we will a) bring them in sentence completion form if it were for the attempt of correlating it with an original completion of one of the manuals or items in use for measuring ego-development and b) use a form of labeled bracketing to indicate the relevant information or grammatical structure and point to it as a phrase of a certain category e.g. [choice 1 …] within a paired bracket. However, we have to keep in mind that grammatological analysis has some difficulties or restrictions: as much as many modern languages have a restricted case system compared to the richness of old-Indo-European languages "we need to cover the functions covered in a particular case and we must not accept traditional labels as face value" (Blake 2001, p. 155). Much of this paper is the search for right terminology and a partial, exemplary analysis to fit in the intended purpose for this article.

Aspects of Grammar: Analyzing Overlay and Superstructure

Given the *philosophy of style* under heading 1.b and the difficulty of repetition and recognition we only open up "a single and same voice for the whole thousand-voiced multiple, a single and same Ocean for all the drops, a single clamor of Being for all beings" (Deleuze 1994, p. 304), here. We offer some specific examples on what is given more granularity and detail to within the analysis of Luhmann and point to that where each "each being, each drop and each voice has reached the state of excess – in other words, the difference which displaces and disguises them and, in turning upon its mobile cusp, causes them to return" (ibid. p. 304) as repetition that which is the being of a textuality, that which makes it cohere, fit together and become thus an organized and unified whole: the superstructure or grammatical overlay, that is hypothesized in this article as the substance or underlay of the ego.

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[2] From Luhmann (2015, p. 49) and Miniard (2002, p. 70): Both responses fit into the scoring category "Complex psychological causation, mutual influence" as well as exhibit a "both… and… and reason" perspective where two differential ideas are connected to show how a good atmosphere within a company can arise.

For determining the complexity of the text, we explore several factors that are used to combine information and convey meaning at sentence and text levels. At the sentence and work level we will be primarily evaluate the following grammatical categories ("cases"), and their combinations, for their levels of cognitive complexity: *Nominal* (Who or What?); *Accusative* (Who or what is being or verbed?); *Dative* (To Whom or What?); *Genitive* (Whose? From what or what of?); *Ablative* (Whence? From where or whom?); *Locative* (Where or wherein?); *Instrumental* (By which means? For which ends); *Comitative* (Together with whom or what?). At the larger textual level, we will consider the complexity within forms of lexical cohesion and grammatical cohesion (conjunction, reference, ellipsis and substitution). These categories will later be used to analyze and asses both quotes from Luhmann`s life work that exemplify stages and phases within a stage and sentence completions that in terms of complexity, grammar and surface content match Luhmann`s writing in these periods, so that a picture of stages and transitions appears that is based on the Author`s understanding of the larger trajectory not only within the context of Luhmann`s writings but furthermore of developmental conceptions of ego, moral and cognition.

Within a Sentence: Subject. Predicate, Object Variations

Luhmann was German, and, since the construct of ego development as well as the procedure for its measurement were developed within the English language, we must consider certain differences between these languages relevant to our grammatical analysis. The Author of this article however is a native German and bases his understanding and analysis of Luhmann on the original texts that are as best as possible translated into the English grammatological equivalents.

What makes English sentences fit together, their coherence, is in many ways similar to German texts. Single sentences contain subjects (the actors), predicates (the acts) and objects (e.g. the goals of the actors` actions), like in "[Subject the author] [Predicate is writing] [Object an article]". However, what makes them different is the number of cases. Cases respectively are the grammatical function of a noun or pronoun. Modern English language restricts itself to three cases the nominal or subjective (he/she), oblique or objective (him/her) and possessive (his/hers). The objective case often called oblique is a nominal case that is used to create a series of subject, predicate and object. For example, in "the author is writing an article", the nominal or subjective case is the author, the "who or what" of a sentence, while the objective or oblique is the "article". In this case that which "is being or verbed". That which is being or verbed was distinct in Old English as the accusative case, and objective case as a direct object. However, Old English impoverished over the centuries and didn`t add to its case structure and thus lost this accusative and its sibling the dative case, which are both present in German language.

In the dative form of the oblique there is no direct object (the receiver of an action) within a sentence following the "author is writing", but a need for an indirect object (identifies to or for whom or what the action of the verb is performed) creating additional information regarding the direct object, "an article" and thus enhancing complexity and meaning. The sentence then would look like this "[Nominal subject: "who or what?" The author] [Predicate verb is writing] [Accusative direct object: "who or what is being or verbed?" an article] [Dative indirect object: "for whom or what is something being or verbed?" for a journal]" – literally the German dative in English would look like this "[Nominal subject and predicate verb the author is writing] [Indirect dative object a journal] [Direct accusative object an article]". As we can see the sentence was enhanced by some sort of possessor or beneficiary "who is receiving" or "for whom" the direct object is generated. By this the verb or predicate is followed by more than one object, it becomes di-transitive – "di" meaning "with two" and "transitive"

meaning "goals" or that which is "aimed at or towards": hence there are now "two goals or aims" instead of one. Like in developmental psychology the accusative object here is necessary but not sufficient for the later. A dative object can only occur after or connected to an accusative, that`s why this seriality is oftentimes called a natural and universal hierarchy in linguistics; more universal languages without accusative don`t show a dative either, all languages with dative show a form of accusative (Blake 2001). However, like in the example above, the dative structure, the indirect object, can often be indistinguishable from an accusative. Especially if the indirect object follows a direction it can demand a second accusative object. This leads to an accusative of "place to which" or a causative e.g. "[Nominal subject and predicate verb the author asked] [Indirect accusative object the journal] [Direct accusative object for a publication]. So, the move from accusative to dative is more a gradient than a leap.

The paucity of case makes modern English a so-called analytic language in contrast to the synthetic German and most other European tongues. We don`t want to lose ourselves in detail here but the basic difference is that English uses strategies like prepositions, verbal voice, word order, and possessive 's for its textuality – intentions, acceptability, informativity, contextuality, intertextuality, coherence and cohesion – whereas Germans use inflection or agglutination to express syntactic relationships and the forms these relationships transport (Haspelmath & Michaelis 2015). Inflection means to increase the length of a word and changing its form by use of morphemes. A root is enhanced and thus a grammatical property assigned.

Since these distinctions are as all distinctions in this paper used in a relative rather than an absolute sense, we can show this with the English example from above. When inflected one can substitute the "author writes the article" by the more passive form of "the article is written by the author", the root "write" was enhanced and inflected by dropping an "e" and adding a morpheme, the "ten".

Agglutination means the creation of compound-words like the German "Zeitgeist" would in English rather be created by a possessive or genitive structure "the spirit of our time" or "a time`s spirit". Some languages even move into being polysynthetic as do some German author`s, where whole sentences are arbitrated by one word like the Heideggerian "being-in-the-world" which fuses the quadruplicity of subject, object, consciousness, and world thus expressing the deep relationship which he so painfully missed in his philosophical predecessors like Immanuel Kant: their ability to have the "complete grasp of the structure of care which includes the phenomenon of selfhood as being-in-the-world" (Heidegger 1969, p. 324).

Still, German, too, has an impoverished case system compared to other Indo-European languages (Quiles & Menchero 2017). The grammatical hierarchies of languages with all nominative, accusative object, dative object and possessive cases often include so-called modifications. Cases which center around changing the predicate verb of a sentence for example through a) adverbial or b) adjectival intensifiers functioning as c) complex prepositions modifying the relationship between nouns and pronouns (I, you, he/she/it etc.). Furthermore, these cases are changing predicates into nouns as categories of place, time or means to an end.

An a) adverb is something that is "ad-verbal" hence for support of a "verb", a Latin form of "at-the-verb". They answer questions of manner of "how" (angrily, happily, easily etc.), place or "where" (near, there, here etc.), time or "when" (soon, now, then etc.) and frequency or "how often" (daily, sometimes, never etc.). An b) adjective`s main syntactic role is to modify nouns and noun phrase through adding descriptive and qualitative (large, nice, cute etc.), quantitative (first, second, third etc.) or demonstrative (this, that, these etc.) descriptors. Com-

plex prepositions c) in contrast to simple prepositions (by, at, on etc.) can be adverbials and adjectives in form of double prepositions (into, out of, from within etc.), compound prepositions (in addition to, on behalf of, in the middle of etc.) as well as participle prepositions (considering, during, concerning etc.) and phrase prepositions (on time, at home, before class etc.). They, too, help modification towards the dative form of objective cases while enriching the complexity and meaning of a sentence through additional information. This additional information refers to:

a)   the *ablative*, the "direction away from of a dative object" e.g. in "[Nominative: "who or what?" the author] [Predicate verb moves] [Accusative object: "Who or what is being or verbed?" his laptop]" [Ablative modification as adverbial of place: "where from?" away from] [Dative object: "From whom or what" his lap]

b)   the *locative*, the "place of dative object" or the place "from where" or "towards which" an object comes or is moved e.g. in "[Nominative: "who or what?" the author] [Predicate verb moves] [Accusative object: "Who or what is being or verbed?" his laptop] [Ablative modification: "where from?" from his lap] [Locative modifier as adverbial of place: "Whereto?" towards] [Dative object: "Towards whom or what" the table]";

c)   the *instrumental*, the means "by which" or the "in order to" e.g. in "[Nominative: "who or what?" the author] [Predicate verb moves] [Accusative object: "Who or what is being or verbed?" his laptop] [Ablative modification: "where from?" from his lap] [Locative modifier as adverbial of place: "Whereto?" towards] [Dative object: "Towards whom or what" the table] [Instrumental modifier as descriptive adjective modifying next noun phrase: "Whereto?" in order to] [Noun phrase predicate and object get up for a break]";

d)   the *comitative*, the one "with whom or what" one shares or intends "to be with" e.g. in the instrumental, the means "by which" or the "in order to" e.g. in "[Nominative: "who or what?" the author] [Predicate verb moves] [Accusative object: "Who or what is being or verbed?" his laptop] [Ablative modification: "where from?" from his lap] [Locative modifier as adverbial of place: "Whereto?" towards] [Dative object: "Towards whom or what" the table] [Instrumental modifier as descriptive adjective modifying next noun phrase: "Whereto?" in order to] [Noun phrase predicate and object get up for a break] [Comitative modifier as phrase preposition "with whom or what" with a friend and a cup of tea and cookies]";

There are many sub-cases and structures of these modifications. And as we will see later, they all help to increase complexity in a relatively fixed and natural order. Now there are no longer two aims or di-transitive expressions of the predicate verb but so called multi-transitive verbs followed by multiple nouns and noun-phrases enhance the informational value of a sentence.

Following two of the basic laws of narration, that of redundancy and variation as well as that of diversification (Koschorke 2012), we now, after having created closeness to the intricate structure sentences can comprise, go into a larger variation of this which for example concern different cause structures; it is now time to look at the theoretical foundation of how different sentences are connected into a whole the author is writing. Afterwards, we dive back into repetitions increasing the resolution of our grammatical television screen as we further diversify and differentiate "into what holds the writing together at its core" by analyzing Luhmann`s life work. Table 2 sums up what was said in this section and ads a bit to it.

Table 2. Some of the depicted grammars, their workings and abilities to convey meaning.

English Name:	Subjective Case			Objective or Oblique Case		
	Saxon Genitive with Suffix			Prepositional Genitive construction		
Gradient	Rather Nominal (Denominating/Objective) →					
				← Rather Possessive (Correlating/Subjective)		
General Name:	Nomina-tive	Nominal or Accusa-tive Pos-sessives	Accusa-tive	Dative	Genitives e.g. of - Composi-tion - Participa-tion - Origin - Reference - Description	Modifications e.g. - Ablative - Locative - Instrumen-tal - Comitative
Valency:	Intransitive		Transitive	Ditransi-tive		Multitransitive
What happens?	Makes the subject and words after the verb the same.	Makes a Nomina-tive by modifying a noun through another noun.	Makes an object for the sub-ject through a direct verb.	Makes an indirect verb by adding a beneficiary of the ob-ject.	Makes posses-sive relations by modifying a noun through a noun with preposition.	Makes complex means-ends relations by modifying the predicate verb.
Meaning Con-veyed:	Enables a naming of the Subject and seeing subjects as their own purpose.	Creates a compound subject or univariate relation.	Indicates action and direction or uni-variate relation.	Shows a beneficiary or empha-sizes spe-cifically thus creat-ing recip-rocal rela-tions.	Makes e.g. pos-session, compo-sition and refer-ences possible	Enables direc-tional and means ends schemes that unify subject and object.

Within a Text: What holds Together Textuality

"'New meaning' is largely created out of 'old meaning'" (Koschorke 2012, p. 163) and thus a text is based on a space or field of "meaningful Integration" (ibid. p. 162) of old into new. It is an openness of semantization and de-semantization and the reappropriation and ex-tension of what was said earlier. M. A. K. Halliday (2004) in his *Introduction to functional Grammar* points out the main difference of analyzing textuality in opposition to the analysis of a single sentence. Here "the organization […] is semantic rather than formal, and much looser than that of grammatical units" (Halliday 2004, p. 524). Far beyond being only struc-

tural it is genetic, too, one has "to be able to think of text dynamically, as an ongoing process of meaning" (ibid. p. 254). For him the dilemma of structure and genesis is solved by moving into distance and making the living, dynamic thing a system. Such a system than can be seen as compartmentalized into four major types of cohesion which interlace sentences within a text: three of them work through grammar and one through lexical means, through repetition and other forms of reappropriation to earlier words and their meaning (Korte, Müller & Schmied 1997).

1. Grammatical Cohesion:
   a. Conjunction: This means that clauses are connected through conjunctions, whereby different types of linking words exist. Additive ones (e.g. and), causal (e.g. therefore), temporal (e.g. afterwards) and adversative (e.g. even though) work together.

   b. Reference: This means that language units cannot be interpreted as separate rather as interconnected, they reference each other. This can happen in personal form through personal pronouns (e.g. they), possessive determiners (e.g. my) and possessive pronouns (e.g. mine). But, too, as demonstrative through articles (e.g. the), demonstrative pronouns (e.g. this) or adverbs (e.g. then) or comparative references. Comparative references again can be pointing to sameness through adverbs and adjectives (e.g. same), similarity (e.g. similar) or difference (e.g. otherwise).

   c. Ellipsis and substitution: Here ellipsis means to elide or drop structural elements (e.g. "I write, and you write" becomes "I and you write"). Ellipsis eventually can culminate in substitution where semantic short forms replace larger elements (e.g. "I write, and you write" becomes "I write, and you, too").

2. Lexical cohesion: This means that "lexis is organized into a network of lexical relations" (Halliday 2004, p. 570). Differently said each word or phrase within a language can in relation to a known cultural lexical background be substituted by other words. A "writer" has lexical cohesion with "author" and "author" with "text", while "text" again points to "writing" and the "writer": languages have synonyms, antonyms, hyponyms, hypernyms and meronyms.

What lexical cohesion is varies strongly with culture and time as Michelle Foucault (2005) shows in *the Origin of Things*. It is based on epistemes which for example rely on a certain amount of similitudes in which "signs themselves […] [are] no more than a play of resemblances, and they refer back to the infinite and necessarily uncompleted task of knowing what is similar" (Foucault 2005, p. 46). And thus, discourse works in such a cultural epoch as something that "by trying to approximate to it, by attempting to say things about it that are similar to it, […] [brings] into existence the infinity of adjacent and similar fidelities of interpretation" (ibid. p. 46). And these epistemes are here hypothesized to not only change with variations in thought through new insights and life-conditions but with each stage of human development, too.

As Jürgen Habermas (1979) puts it in the *Reconstruction of Historical Materialism,* cultures do not per se belong to a stage: the complexity of cultures is a multidimensional concept it can be judged "in respect towards size, interdependence and variability, with respect to achievements of generalization, integration and respecification" (Habermas 1979, p. 141) as well as the increase in complexity of single individuals in a culture not necessarily leads to an overall increase in complexity rather can create "evolutionary dead ends" (ibid. p. 141). And since cultures don`t share solid boundaries as organisms do or as a person does "the relation-

ship between complexity and self-maintenance becomes problematic" (ibid. p. 142) since larger numbers of people have to adopt to new forms of discourse and inhabit new epistemes and according perceptions and behaviors to sustain what lexico-grammar transports within the operational realm. However, since a) deterioration in individual developmental levels can happen through personal practical and moral life dilemma and b) these quandaries and their solutions can "gain entrance into the interpretative system of the society through exemplary learning processes" (ibid. p. 161). The evolutionary challenges perceived and spread by these individuals and the initiated learning processes can then c) make an adaptative shift of the whole society necessary and finally d) "the introduction of a new principle of organization [e.g. a new episteme] means the establishment of a new level of social integration […] [for which] the learning processes of moral-practical consciousness functions as pacemakers" (ibid. p. 160). From our point of view each culture thus establishes a certain grammatical web that e.g. impoverishes like modern English when certain stages of development – as we will see, these who are closer to the end of a tier – which have enacted a society with multiple modes of grammar disappear. Thus, impoverished grammar might, too, inhibit the overall capacity of a society to evolve since more complex modes of discourse are inhibited by social convention and thus might be part of solidifying autopoietically processes. Or as Luhmann (2018a, p. 538) would say systems "create observations that confirm and condensate certain semantics by which meaning valuable enough to be preserved gets identified, held on, remembered or left for oblivescence".

Between this layer of cultural discourse and that of widely universal and cross-cultural grammars, which only vary in sophistication and scope as numbers of grammatical operations and functions, a third element is essential to hold together textuality in its core. The theme to rhema shifts that bind together the surface level grammar and the deep embodied and immanent structural concepts, the lexis of discourses (Ongstad 2007). Normally "the theme is the element which serves as the point of departure of the message; it is that which locates and orients the clause within its context. The remainder of the message, the part in which the theme is developed, is called […] the rhema" (Halliday 2004, p. 64). Mostly the theme is recognizable as it introduces the sentence as in "[Theme: "who or what is it about?" the author] [Rhema: "what does the author do, what is important about him?" writes the article]".

However, when it comes to two or more sentences what is additionally of interest is the question for new and for already given information. The interlacing of sentences, as shown, works through lexical cohesion, through the reappropriation of the earlier and the connection or contrast to something new. Here we can redefine theme as that which creates the lexical cohesion as adopting the given meaning of an earlier sentence, and the rhema as that part adding new content, information and meaning. Then the theme is no longer necessarily the introduction to a sentence, though that`s the common case, but can show up as any part of the sentence relating back to something earlier and given: to that which is explored, the thematic content of a passage or text – e.g. as in ["Theme the author] [Rhema writes an article.] [Theme: as given information and lexical coherence The article] [Rhema: as new information is about language]" compared to ["Theme the author] [Rhema writes an article.] [Rhema: as new information It was language] [Theme: as given information and lexical coherence the article] [Rhema: as new information dealt with]".

Overall picture of Grammatical Analysis

As depicted grammar and lexis, the universal and the culturally conditioned interact within textuality. In the middle so to say is the process that a text is: a dynamic flow of theme into rhema, given into newness, repetition into difference and reappropriation into recognition. The process is depicted in Figure 1.
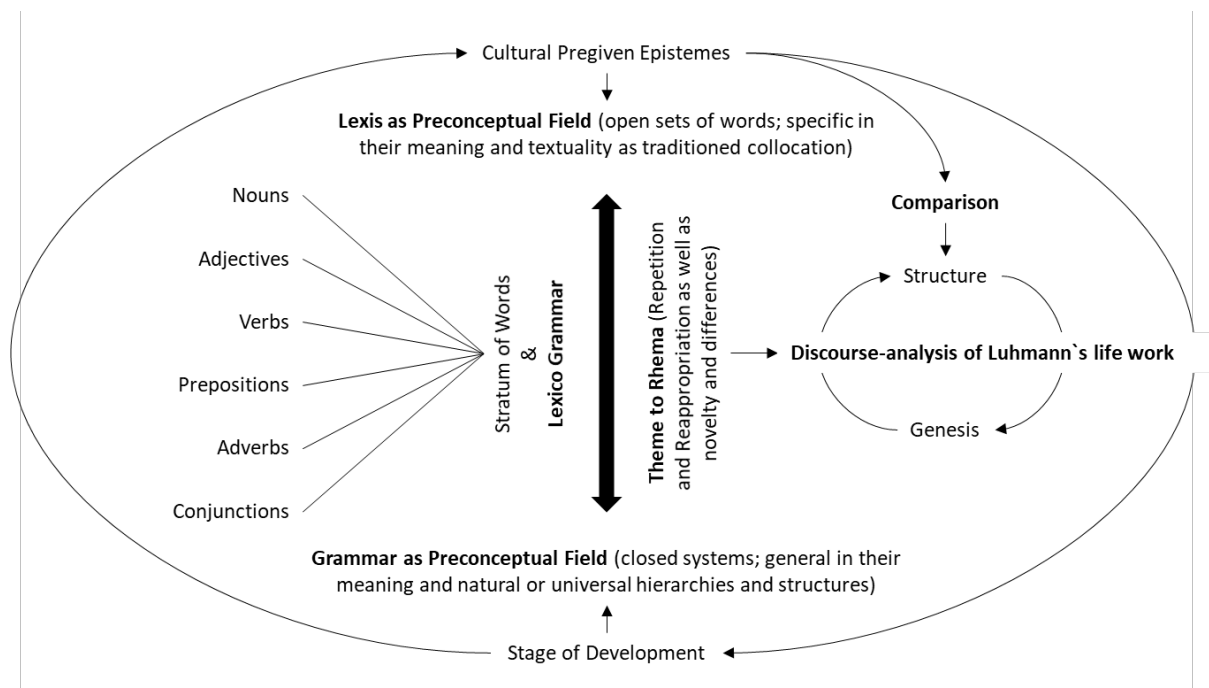
Figure 1. Structure of the grammatical analysis of Luhmann`s life work integrating the "lexico-grammar cline" from Halliday (2004, p. 43).

The Discontinuities in Luhmann`s Writings

The core of this paper to crystalize a developmental progression from the conceptual complexity and content of Luhmann's writings that simultaneously is used to exemplarily carve out, illustrate and further develop a domain general scheme for the developmental analysis of text. This will contribute to a general understanding of Luhmann's ideas, and their progression while it both supports and challenges the usefulness of different tools for measuring stage-like development thus opening a window for a broadened discourse that includes the different conceptions of Ego-Development, models of hierarchical complexity, moral development and spiritual as well as philosophical conceptions of growing and waking up as a human being. We will focus particularly on the progression of ideas specifying the relationship between a system and its environment, and how systems are created and self-maintained. The first half of this endeavor will almost solely focus on Luhmann and some of the main ideas of his earlier writings including the operationalization of mistakes and trust in formal organizations. Towards the end of the article we put emphasis on a rich comparison with other late stage thinkers to show not only grammar but some general traits or surface structures people at these stages seem to embody. This, too, is accompanied by differentiating two basic types of looking at the world: an inside, more Aristotelian, and an outside, more Platonic, view – both terms will be clarified later in section *3.b.iv Preliminary Contemplations on Tier Patterns*.

One of the main ingredients of Luhmann`s two major works the 1984 *Social Systems* and the 1997 *Theory of Society* is the idea of differences between systems and environment. These differences start with the "invention of negation and with the through negation enabled Yes/No coding" (Luhmann 2018a, p. 459). The coding allows one to accept communicative offerings and thus the variation, selection and re-stabilization of system-boundaries, "a unity in difference to an environment" (Luhmann 2002, p. 412). However, for late Luhmann both, yes and no, are intriguingly connected – the variation or the no is, too, a selection, a yes, to-

wards something more or less contrary or to nothingness. In his posthumously published book *Organization and Decision* (2000), he writes besides the duality created by a coding about the possibilities of pointing to an "either… or", a "both… and", as well as seeing a "both… and… and the relationship of both sides of this both… and".

Coding means that we create a dichotomy, one that allows difference and thus divergence and novelty. Derrida (1999, pp. 44f) calls "the praxis of language or of coding as a play of forms without specified and unchangeable substance, […] a play of traces"; traces which, so Luhmann, represent systems as relatively stable and fixed as well as irritable modes of communication. The coding allows to test for functional fit and selection, variation and integration or negation. When a coding arises, for example as the difference of formal and informal organization, the logically sound first step is the recognition that one side of the coding is not the other (A|B) or both are the same, or rather: one merely reduced to the other (A = B). From this starting point Luhmann unfolds a trajectory in *Organization and Decision*: after the first dichotomy comes a second where an organization is always either formal or informal (A $\veebar$ B) and the organizational procedures sort events into these categories, or it arises as an univariate relation which easily leads to the subordination of the one under the other, where either the formal or informal is superior or earlier to its opposite (A → B). For Foucault this was the main mechanisms of 16th century discourse "it was the relation and interplay of subordinations between describing, articulating into distinctive features, characterizing, and classifying; it was the reciprocal position of particular observations and general principles; it was the system of dependence between what one learnt, what one saw, what one deduced, what one accepted as probable, and what one postulated [as truth]" (Foucault 1972, p. 57). As a third after the second where "opposites had been formulated, where depending on circumstances one or the other side appeared as worthy of promotion […] [, where] groups took on the appearance of formating cliques" (Luhmann 2000, pp. 303f) comes the recognition that there can be "as well formal as informal organization" (ibid. p. 303), a "both… and" (A ∧ B) approach to looking at ones system. This, too, can be the recognition of the inherent interactions, interconnections and thus the necessity of integration of both sides (A ↔ B) beyond univariate relations; as a fourth mode an organizational system can be "depicted as basically bi-resilience" (ibid. p. 304) as unity that is "autopoietic and the construction of the system with one operation" (ibid. p. 304) an operation which is basically both sides of the coding and their relationship to each other, a oneness (A ∩ B) that at the same time maintains itself in this relationship through being both: what it is and what it is not (A = ¬A) where both sides are equally important and can only exist in being co-subordinated to each other or in a permanent shift to reference both.

Coding thus allows a trajectory of unification of its own opposites which at the first sight mirror the steps of the "polar opposite pattern" that Terri O`Fallon (2010, p. 20) points to in her thesis *The Evolution of the Human Soul*: "awareness of only one side of a pole; awareness of polar opposites and choosing either one side or the other (either/or; neither/nor; awareness of and choosing both sides of the polar opposites (both/and); interpenetrating both sides of polar opposites: the passive, active, reciprocal and interpenetrative phases of understanding.

However, Luhmann as a student of Talcott Parsons does not identify these grammars with passive, active, reciprocal and interpenetrative, rather sees them as his versions of Parsons`s (1991) adaptation, goal-orientation, integration or interpenetration and the maintenance of patterns. Thus O`Fallon`s fourth Term would in this scheme just be the third, while reciprocation as we will see later would be just a minor part of this third step in the overall quadruplicity. Adaptation between the environment and the social system is basically a function of communication as evolution "the basal process of social systems, which reproduce the elements,

out of which they consist" (Luhmann 2012, p. 191). Activity according to Parsons (1991, p. 4) comes into play through goals, where an actor "may actively attempt to control the situation in conformity with his wishes or interests". For Luhmann (2012) goal-orientation or attainment and activity is based on the realization of a system/environment difference in reality where the system can be either a person as a consciousness-system in difference to other persons or any system as coherence of communications distinguishing itself from other modes of coherent communications. However, this "either/or is no absolute, it is true only relative to an individual system, but in the same way objective" (ibid. p. 244). It is the correlate of observation, which introduces such a distinction in so far as "they pursue a higher ordinal-interest" (ibid. p. 246), hence certain goals. The difference between system and environment asks for mechanisms of integration or interpenetration. Here Luhmann (2018b) is quite consistent with Parsons`s (1991, p. 10) idea of "a kind of 'compromise' between the 'strains to consistency' of […] personality, social and cultural components respectively, in such a way that no one of them closely approaches 'perfect' integration". Distinctively, Luhmann who rather looks at communication than at personality as well as social and cultural components, considers integration as a structural drift of "integration and disintegration from instant to instant […] as the countless eventful operative couplings, which cause a permanent establishing and dissolution of system-contexts" (Luhmann 2018b, p. 605f). In *Social Systems* Luhmann (2012, p. 290) speaks here of interpenetration "as the intersystem-relationship between systems, which reciprocally belong to environment for one another […] [and] reciprocally enable each other by yielding their pre-constituted private-complexity into the respectively other" (ibid. p. 290).

The fourth on the trajectory, Parsons`s (1991, p. 13) idea of latent pattern maintenance, "the formulation of mechanisms which 'account for' the functioning of social systems, for the maintenance or breakdown of given structural patterns, for a typical process of transition from one structural pattern to another" included for Luhmann (2012) to much of the traditional ideas within the wholistic or neo-platonic mysticism of Hegel, the idea of a real unity within being. To make the grade of his post-structuralist roots he therefore introduced a new fourth idea: self-description as self-reproduction, which sustains a system`s structure as process by thematizing itself. A process that is the unity of difference and repetition, a system as its own "autopoiesis": how communication creates communication and creates structure within a temporal living out as repetition of certain operations and the permanent reappropriation of the old status, or the reaction and constitution of new operations from old ones if new irritating events occur.

While for Luhmann (2017a) in his 1975 book *Systems-theory of Society* this self-thematization is "completely immanent" to social systems and reflects the idea of what is consciousness in conscious systems or persons, Luhmann`s later writings emphasize the necessity "of a change in form of self-description […] [which] lies within the transition from a first order observation towards a second order observation" (Luhmann 2018b, p. 1140f). The "use of self-reference with discriminatory function" (Luhmann 2017a, p. 916), which is as a self-reassurance that is completely immanent to the system a "constitutional-process which thematizes systems-identity" (ibid. p. 920f) and controls e.g. adaptation, the source of adaptive change of system and/or environment, turns first into self-observation: a distinct operation as the "handling of distinctions. […] The introduction of the system/environment difference into the system which constitutes itself with the help of this distinction; and at the same time as an operative moment of the autopoiesis, because within the reproduction of elements it has to be guaranteed that they are reproduced as elements of the system and not as something else" (Luhmann 2012, p. 63). Observation becomes the coordinative function of self-referential-closed systems with openness towards their environment – they are holding all earlier functions of communication, difference, integration and self-thematization together. With an over-

flow of communicative possibilities Luhmann states the necessity of a level of second order observations, which means both a) that the differences and distinctions, the observations and descriptions, are created by differences and distinctions, the observations and descriptions themselves and thus have to describe themselves in their descriptions – the observer "must apprehend its content as a self-descriptive content" (Luhmann 2018a, p. 16) – b) and to take responsibility and make a choice "from which system it views others as environment […] and that descriptions are poly-contextual: each describer in his descriptions is describing different-ly" (Luhmann 2018b, p. 1141).

Luhmann himself distances himself from a hierarchical developmental perspective when he negates the idea that second order observation is sourced by a later, higher or "'better' ob-server – but rather by just another observer" (ibid. p. 1142). Nevertheless, the structure of his three greatest masterpieces the 1975 *Systemstheory of Society*, the 1984 *Social Systems* and the 1997 *Society of Society* show three phases of his orientations towards how and by which operations systems are created, a) by themselves through immanent self-reflection, b) which is framed later on as an observer coordinating four functions of systems (which were named adaptation, goal-orientation, integration and latent pattern maintenance by Parsons) or c) through pointing to observations of observations and a second order observer, which is able to decide for certain descriptions of society, by finally including that what is doing the describ-ing into the descriptions and by being aware of alternative descriptions and describers in an autological fashion.

We now take this trisection of Luhmann`s life for our course through his work and direct our focus especially on how two sides of a coding are related to each other, especially systems and their environment. The passages from Luhmann`s books where chosen by looking into the index of keywords and basically choosing "difference between system and environment" or "differentiation". Too, for the final assignment of a books to certain phases, the first and last chapters were compared for eventual shifts in grammar and stage especially as some of the Luhmann`s later books have been written in parallel over the course of seven years or so. Additionally, the author has read approximately half of the 27 compared books and articles in completion and the depicted trajectory was researched and recognized within several authors life works.

Our hypotheses here as depicted in Table 3: Terri O`Fallon's polar opposite pattern depicts only the first of the three phases Parsons and Luhmann identified, thus subdividing the inte-grative phase into reciprocal and interpenetrative, i.e. integrated, substages. The distinct func-tions of the social system and the different tier changes are visible both in sentence comple-tions and Luhmann`s as well as other author`s writings and pointed to throughout the rest of this article. Additionally, Table 3 shows the trajectory we genetically investigate within the next three subsections before a more structural section synthesizes the pointed-out discoveries into a larger picture. A more comprehensive outlook of the stage trajectory in comparison is given in Figure 6 in the end of the article.

Table 3. Investigated trajectory of the next section and mentioned models in approximate correlation.

Luhmann		O`Fallon		Hy/Loevinger & Cook-Greuter			Mascolo & Fischer	Kohlberg & Ha-bermas
Social-System		Perspectives		Ego-Development			Dynamic Skills	Morals
Self-Thematization	$A=\neg A$ or $A\cap B$	5.0	*One Pole*	E9	*5/6*	Construct-Aware		Stage 6
								Stage 5/6
Integration	$A\leftrightarrow B$ or $A\wedge B$	4.5	*Integrated*	E8	*5*	Autonomous	Single Principles	Stage 5
		4.0	*Both/and*	E7	*4/5*	Pluralist	Abstract Systems	Stage 4/5
System/Environment	$A\rightarrow B$ or $A\underline{\vee}B$	3.5	*Either/or*	E6	*4*	Achiever		Stage 4
							Abstract Mappings	Stage 3/4
Adaptation	$A=B$ or $A\mid B$	3.0	*One Pole*	E5	*3/4*	Expert		Stage 3
							Single Abstractions	Stage 2/3

The Early Works of Luhmann: From the Conscientious 1960s to the Construct-Aware 1970s

1964 and 1966

Luhmann`s second book is called *Functions and Consequences of formal Organization*. It deals with the formalization of organizational systems as an elementary process of human contact and relationship (Luhmann 1964). It shows the necessity and possibilities of formal and informal strategies of establishing social systems and the resultant problems of possibilities for increasing complexity.

Differentiation here is a means of "keeping certain states and trajectories invariant in opposition to a changing environment, which can be improved and expanded, by subdividing a system" (ibid. p. 73). Differentiation takes the leading role and integration is subordinate to differentiation, "it basically serves the goal of boundary-retention" (ibid. p. 79). Too, it has to be mentioned that integration is synonymously used with adaptation. Some years later in his dissertation about *Right and Automation in public Administration* this conflation of terminology still exists, however than, he states conversely to the subordinationistic perspective that for sustaining a system in a highly complex and volatile environment two strategies are equally necessary: the first, namely adaptation or integration "as the institutionalization of common values and forms of cooperation between system and environment relevant to them" (Luhmann 1966a, p. 23) and "as alternative to this 'external' mode, there is an 'internal' mode to reduce complexity, namely through internal complexification of the system"(ibid. p. 23), hence differentiation. The increase of inner variability leads to an ability to chunk down what comes from the outside of a system.

In the same way one can see the focus on sustaining boundaries in Luhmann 1964 compared to 1966, in observation of the concept of mistake. In his book about formal organization

he writes about the frustration of expectations and the assignment of guilt and causality: the lead motive is "the relation of the salient, disappointing experience to solid and proofed experiential structures, […] which cannot question the rightfulness of expecting the right. […] The explication of frustration and reaction of disappointment in open action both have the symbolical meaning of a demonstration of a violated norm" (Luhmann 1964, p. 253f). The fact of a mistake "as a sort of natural catastrophe, which invades the system from outside" (Luhmann 1966a, p. 76) falls away out of the conceptual space. The mistake is simply "an interpretation of events […], already an internal category of the preparation of experience" (ibid. p. 76). Additionally, as it cannot be localized internal either, it "perforates the internal/external differentiation. It further fuses the differentiation of structure and process, as it can only show up in a working process, but as a disruption of its original structure" (ibid. p. 75).

Luhmann in 1964 has in his dealing with the concept of mistake and frustration a grammatical overlay that is both strongly relativistic in an "either… or" fashion and polarizing. The relativistic side shows up e.g. in sentences like "[relativity notion depending on] [sources of dependencies the whole situation of the system and its overall attractivity] [either… or notion it can be better ruled by threat of punishment or positive incentives]" (Luhmann 1964, p. 255), while the polarizing aspects can be recognized in "[neglected idea 1 the formalisms of expectation and sanctions understands itself not through itself,] [polarization it rather] [prioritized idea 2 has to be explicated in its specific function and the resulting follow up problems]" (ibid. p. 254). Besides that, as shown two completely opposite points of view can be coordinated but not in the "both… and" fashion of his 1966 writing rather as subordination of one side within two ambiguous perspectives. But not only can one see the differentiation through this grammatical underlay of polarizing and subordinating but the reflection of the limitation to one`s own capacities – "specifically with increasing differentiation it is no longer possible […] to master the system with the normal, natural-concrete perceptional and emotional powers of humans" (ibid. p. 81).

This sentence echoes the overall structure of Luhmann`s style in *Functions and Consequences of formal Organization* from 1964: sentences are highly complex and use many forms of interlacing across sentences or combinations of independent clauses into one sentence. Contrary to this *Right and Automation* in 1966 is largely based on short nominal sentences, longer sentences are linear and as we will see can be divided in two classes. Additionally, there is a change from "this means" to "that is", one can as later shown, explain from nominal single persons` points of view in contrast to the comparative and relative structure within later phases of a grammatical cycle.

Grammar from 1964 to 1968: Achiever vs. Pluralist

In 1968 Luhmann's book *Trust: A Mechanism for reducing Complexity* was published. Trust didn`t play a large role in 1966. However, there is one passage of interest. It deals with the protection of trust and shows the simplicity of the early "both… and" structure. Luhmann (1966a, p. 90f) writes that "each system needs 'latent' functions and structures to stabilize itself; they cannot be illumined without forcing the system to change its identity and relocate the shadow of latency. Relocate it to the realm of latency of the public administration, to the function of its end-ideology and the function of law. One would overstrain the decision capacity of the state-administration, if one wanted, that its constituting moment: the right, in the sense of a limited public interest to justicement, is used as an available value besides others. Is it doing so and believes thereon, than it uses formulas like 'public interest', 'interest in legal certainty', 'equality', 'justice' and so forth as superficial empty formulas and retains its own essence in the unconscious. The over abstraction of these terms serves simultaneously to secure the latency of some of the motives and decision-making basis."

This passage shows that some basic characteristics like sentences though using nominal, accusative and possessive grammar, these cases can be identified grammatically by asking for a nominative, the case of the subject of a sentence and predicate nominative which can be a transitive verb, too, and which is revealed by the question: "Who or what?" One does not make a huge mistake when asking What between some of the sentences "[Nominal: what? One would [transitive verb 1 overstrain] [nominal phrase the decision capacity of the state administration,] [if] [who or what? one] [transitive verb 2 wanted [that clause that its constituting moment is used as] [who or what? an available value besides others]". The overarching grammatical pattern is that of a definition pointing to feedback loops creating an implicit "both… and" and dealing with effects of a "both… and" perspective. As Luhmann precedes he shows how the "public interest" as additional value to protect trust leads to "more attention for the system-principle of constitutional administration, which basically is less able to serve public interest" (ibid. p. 91). Differently said: non-linear effects are made visible.

Trust in 1964 cannot be hailed by asking the nominal "what?", rather a location as a "wherein" is most significant when "failproof, but therefore partly feigned procedures of consensus-creation [like trust] can only be institutionalized within a certain social circle, which is obliged for acknowledgment of the result" (Luhmann 1964, p. 71). It can be best identified by the set of cases not dealt with in modern English. The cases which all mark the same syntactic relation, that of optional modifiers to the main verb we introduce in the paragraph

Within a Sentence: Subject. Predicate, Object Variations.

We basically know these cases from the Latin, Russian or old Indo-Germanic languages and in this case belong to the branch of ablatives, locatives, instrumentals and comitatives. The locative is the case which locates something either physically or temporally and can be identified by the question: "Where or wherein? When?" e.g. as in "[When or wherein can trust be institutionalized? Within a certain social circle, which is obliged for acknowledgment of the result]". Further in 1964 "contracts, if one or many have to input without immediate satisfaction, […] a contact has to be carried by trust" (ibid. p. 72). There the main case is another modifier to the verb "[by which means or how can a contact be carried out? by trust]" – creating an adverbial phrase using the preposition.

In the 1968 *Trust* the feeling of trust, too "enables relatively safe expecting and therefore, too, an absorption of residual risks, but is itself neither favorable nor unfavorable expectation, but condition for the possibility of both. Trust is the precondition for trust as for mistrust, so to say for each kind of engaging oneself into a certain type of attitude towards the future" (Luhmann 2014, p. 25). What is more obvious here, than in the so far quoted passages from 1966, is the "both… and" condition of the grammar. While in the earlier writing "both… and" seems to be the structure of what is implicit as the basic awareness or way of conscious preoccupation, it now is pointed out clearly. Furthermore, it is now related to a direct or accusative object. This object is subjected to the "both… and" agent – "[ergative agent trust] [who or what is being or verbed? enables relatively safe expecting and therefore, too, an absorption of residual risks,] ["both… and" agent but is itself neither favorable nor unfavorable expectation,] [who or what "both…and" is being or verbed? but condition for the possibility of both]". At the same time accusative forms we only knew from Latin in concrete form like the accusative of "place to which" show up: [subject complement or reflexive Trust is the precondition] [who or what is being or verbed? for trust as for mistrust, so to say] [who or what is being or verbed? for each kind of engaging oneself] [who or what is the place that is being or verbed? into a certain type of attitude towards the future]".

This more complex grammar shows up already on the last pages of the 1966 *Right and Automation in the public Administration*. While within the more polar or paradoxical sentences of 1964, like "fictions have to be depicted as realities, but may not be treated as realities" (Luhmann 1964 p. 278), one has instrumental notions recognized by the question of "How", forming an instrumental case of causers and thus showing positive directions for action, the accusative and thus agentic sentences of 1966 show a critical stance to agentic practices and means, goal-orientation and causes: "[who or what as means or practices? If goal-orientation on the one side and justice-orientation on the other have ever provided] [who or what is being verbed as criticism? the best alternative for reducing complexity, has never been proven; neither, [instrumental as what and "both… and"? how both methods relate to each other and how they can be boxed inside each other]" (Luhmann 1966a, p. 142).

If we want to explain it solely on the basis of grammar as what sustains and is conscious perception as both a spark of information riding on it and the self-recognition of this grammatical web through the attended spark by selective apperception, one can say that it could arise through a third grammatical operation similarly as models of hierarchical complexity assume that growth and development through abstract stages is signified first by being able to think "in terms of a single, intangible, generalized abstract concept […] before teens begin to coordinate two single abstract sets into an abstract mapping" (Mascalo & Fischer 2010, p. 158) and finally systems thinkers are able after creating relations between multiple abstractions "to coordinate two abstract systems level conceptions into a system of abstract systems" (ibid. p. 159) through a third, a single principle.

The standard structure of the 1964 writing are sentences built up out of three segments: the first is either quite short, sometimes just a connective, and builds a linking to the earlier sentence, it is referential, switches from rhema to theme, from the unknown to the known – or a more elaborated version of the rhema –, and substitutes through a) short phrases, followed by two sentences which are causally connected, polarized or subordinated or b) the earlier theme is further elaborated and differentiated within a theme while the third part offers a new rhema. The third part thus is oftentimes built into the sentence by a connective which expresses an opposing or limiting statement. Follow up sentences connect through complex mechanisms of interlacing as said, they both integrate and further evaluate the earlier, they are co-subordinated and switch references fluidly.

For example, when it comes to functional differentiation "[rhema 1 subsystems can grant the invariability of their own boundaries within the overall system.] [theme 1 as new information about rhema first part Certain states, action-sequences, event-trajectories are guaranteed,] [theme 1 second part and others ruled out,] [rhema 2 limiting statement without other system members having to bother themselves.] [theme 2 Each subsystem can follow its own purpose,] [rhema 3 limiting statement without attending to it recklessly or exclusively,] [rhema 3 part two and by this stay highly indifferent against that what others are doing]" (Luhmann 1964, p. 76f). This structure matches the more complex achiever responses in the sentence completion test, which, too show instrumental and locative grammar and modifications as can be seen here: "[People who step out of line at work…] [rhema 1 with instrumental of cause often believe they have valid reasons to step out of line.] [theme 1 as new information They should be listened to [rhema 2 limiting condition however, boundaries must be set and communicated] [rhema 2 part two and consequences must be made known of behavior ignorance]" (Zavarella 2009, p. 54).

In 1966 not only the way differential sentences are connected changes: there is not as much a shift from rhema to theme, rather each sentence is a rhema itself and the connection happens in an equation-like or homonymic style through substitution and pronominal reference. So,

differentiation is defined as something that is beneficiary in a "both… and" manner, for example "[rhema 1 the society becomes more elastic, adaptive and simultaneously sustaining.] [pronominal reference as equation It can] [rhema 2 in limited doses react problem-specific,] [rhema 2 equation with new information hence fast]" (Luhmann 1966a, p. 136). There arises a new net which can hold two perspectives at the same time, through this third operation. As we can see in the sentences from 1964, there is one action-oriented part and one that is passive in the sense of describing adaptive behavior – "[active part Certain states, action-sequences, event-trajectories are guaranteed, and others ruled out,] [passive part without other system members having to bother themselves]". – or shows adaptive processes of two co-subordinated parts – "[theme One can only speak of a subsystem of an overarching system,] [rhema 1 subordination of subsystem if the invariability and independence from environment of the subsystem is directly or indirectly put into the maintenance-problems of the main system;] [theme 2 adaption of subsystem if, in other words, the subsystem serves a function in the overarching system]. [theme 2 of subordination Within the scope, that subsystems devote themselves to functions of the overall system,] [rhema 2 of adaption of overall system through subordinates it becomes structured specific to functions]" (Luhmann 1966a, p. 77).

As Luhmann (2014, p. 25) writes in the late 1960s on trust, when he says "only thus far, as the other human is not only content in the world, but steps into consciousness as an alter ego, as freedom to see things differently and act distinctly, the traditional self-concept of the world gets shattered, its complexity visible in a whole new dimension, for which at first no appropriate form of understanding and absorption is available", to see a "both… and", one needs to generate a new form of understanding. Gilles Deleuze, when talking about *How to recognize Structuralism*, too, pinpoints that precisely, when he says that "the first criterion of structuralism, however, is the discovery and recognition of a third order, a third regime" (Deleuze 2002, p. 171). This third regime shows up in many thinkers but prominently in Immanuel Kant (I998) when he in his *Critique of Pure Reason* introduced a third a prior or prerequisite to apprehending the world: "there is more at work than the single faculty of thinking" Kant (1998, A97) said "namely the understanding, and the understanding itself, as a faculty of cognition that is to be related to objects, also requires an elucidation of the possibility of this relation", a transcendental aspect. This analysis leads next to others to a series where "receptivity can make cognitions possible only if combined with spontaneity. This is now the ground of a threefold synthesis, which is necessarily found in all cognition: that, namely, of the apprehension of the representations, as modifications of the mind in intuition" (ibid. A97). All of Kant`s categories reveal this triplicity or seriality of three abstract operations, as well as the overarching trisection of time, space and the "pure, original, unchanging consciousness named transcendental apperception" (ibid. A107) that makes any integration of opposites and their "both… and" state possible.

The focus thus shifts to attempts for integration, of inner and outer, as shown earlier or in Parsons (1962) terminology: the cognitive orientation, the judgment of objects based on standards, and the appreciative value orientation, which "involves the various commitments to standards by which the appropriateness or consistency of the cathexis of an object or class of objects is assessed" (Parsons et al. 1962, p. 60), moves to a moral mode, where the impact on other action systems is assessed and how choices affect the integration of both, "his own personality system and the integration of the social systems in which he is a participant" (ibid. p. 60). The graduation of this stage might be the crossing over from reciprocal into interpenetrative in Terri O`Fallons (2013, p. 19) definition of it where "the subtle interior and the subtle exterior begin to come together".

In the 1968 book *Trust*, "trust and familiarity are consequently complementary means of absorbing complexity and, like past and present themselves, chained to each other. The unity

of time, which separates past and future, however relegates them to each consecutively, and allows such a relationship of complementary accomplishments, where one of them requires trust and the other all the same familiarity" (Luhmann 2014, p. 26) – they, trust and familiarity, serve integration and are integrative parts of each other. So, while here sentences are connected through substituting the earlier ones through abstracting, e.g. thematizing it as "unity of time", the overarching grammar moves from parataxic or equation-like "arranging side by side" or using additive conjunctions like "and" – the syndetic parataxis –, towards hypotaxis, which means as much as "arranging under", by using subordinating conjunctions like "if…", "however", "where" or "even if' and auxiliaries like "would".

However, in the same way as in Luhmann`s *Right and Automation* we can see two distinct grammatical styles mixed in *Trust*. Why is that of importance? If we take standard sentence completions from the pluralist stage, they mainly fall in two categories: those which are simple parataxis or nominal phrases like "Raising a family… [nominal as is what? is a source of great pleasure, lasts too short a time, and is unpredictable]" (Hy & Loevinger 2014, p. 20) and nominal and accusative combined like in "People who step out of line at work… [nominal as is what? need to be examined individually to see] [accusative of who or what is being or verbed? both what the stepping out of lines means to them and also what it means for the organization; appropriate action can follow such an analysis]" (Zavarella 2009, p. 56). Contrary to this the Autonomous stage`s completions start to include more complex grammar and more grammatical cases reminding of Luhmann`s 1964 Achiever-like writing. For example, a sentence completion about a person stepping out of line at work at the Autonomous, i.e. Strategist, stage reveals grammar that is less action-oriented or accusative and dealing with ergative agents, but is revealing a dative-oriented structure, the case of the indirect object, which is together with the genitive of most languages indicative of possession, similar as some forms of the Latin ablative. They designate concrete or subtle spaces as the source or place from which or the time when something happened. It basically modifies nouns, pronouns and adjectives, and can be identified by the question: "Whence? From where or whom?"

So, "people who step out of line at work… [what? may be acting] [from where or whom? from a variety of motivations, some due to unresolved issues of their own, others due to genuine inadequacies in the work environment]" (Zavarella 2009, p. 61), are doing this because of some sort of being possessed by exteriors reverberating in themselves, or "people who step out of line at work… [what? are often demonstrating that something is wrong] [locative as where or wherein? in their work situation, personal life, interpersonal relations or that their goals and values about work are different than other people's]", and thus a recognition of projected internals moves into place, that is pointing towards the place where interpenetration in the sense of O`Fallon (2013, p. 9) where "one understands projection and introjection" seems possible.

Grammar in 1968 and 1969: Pluralist vs. Autonomous

Luhmann`s criticism and questioning of the conventional "means/end-considerations together with their mathematical intermediary-calculations" (Luhmann 1966b, p. 93) between 1966 and 1968, has to make place for the turn towards a conscious preoccupation and interpersonal mode that is "a transcendental reflection […], which does not base its arguments on the complexity of social systems, rather on top of the through it enabled complexity of the world" (Luhmann 2014, p. 27). The accusative construction with the ergative agent that is verbed as an additive series of "both… ands", that is "a conception of rationalization that brings together the social-sciences` and the business-administration's research areas" (Luhmann 1966b, p. 93), where "the whole interaction of task description and organization, formal behavioral rules and informal orientation, administrational large scale planning and small

tricks, which one learns at the work-place, social reconstructions and unresolvable habitual carriages, which have to be carried personally" (ibid. p. 93) is transcended and included by a new grammatical style and thematic orientations. However, this transcendental reflection that is added, and is reminding of Kant, is not directed towards ideas, but the possessive construction starts to add first elements of locative, ablative to the dative and genitive framing – which historically have fused e.g. in Greek (Blake, 2001) – and thus is rather directed towards "[what? Stabilizing] [series of accusatives of who or what is being or verbed? systems in processes of intersubjective communication, which can apprehend and reduce more complexity of the world, and direct one's trust] [dative or ablative to whom? towards the functioning of these systems.] [Ergative agents as who or what is being or verbed? Only this way the transcendental process of world constituting and meaning can be directed] [dative as to whom or whereto? towards a higher stage of complexity]" (ibid. p. 28).

While in the accusative phase the hypotaxis superstructure, subordination of one clause to another, is much based on causal relations and auxiliaries, e.g. for Luhmann an extended "both… and" term of rationality "[has benefits,] [condition or reason because] [otherwise these factors, which co-constitute the decision process and outcome, cannot completely be considered]" (Luhmann 1966b, p. 94), that a system can be sustained "[condition or reason if] [both the code of conduct is minded and the means are fulfilled" (bid. P. 94) or "[structuring a system towards prefabricated ideas,] [hypothetical auxiliary would reduce the capacity for complexity equally]" (ibid. p. 94), connectives become formative for contexts in 1968. This new structure of conjunction by concession, comparison and prepositional phrases as adjectives shows up for example here: "[It has to be assumed that] [prepositional phrase as adjective with growing social differentiation other elemental] [comparison as well as more demanding mechanisms become reflexive] [list of examples – the venality of money] [comparison is in the same way as the investigation] [prepositional phrase as adjective through reflexive sciences] [comparison like epistemology, logic and methodology]" (Luhmann 2014, p. 77).

The prepositional adjective phrases seemingly substitute both the use of nouns and prepositions plus verbs and comparison as well as listing structure moves beyond additive rows and "both… and" notions and the statement of absolutes and exclusives, within Luhmann's writings of 1966, where for example "[It has to be exposed], [condition that already the] [additive phrase of nouns foundation of all decision-programs, the definition of the law-constitution, and the last means of the system,] [both and phrase are both at the same time, solution] [preposition with noun for the problem and definition] [preposition with noun for the problem]" (Luhmann 1966b, p. 94).

So, here we have to move back towards thinking about how coherence between sentences is created, too. We already mentioned that sentences are no longer processed as equations after the nominative period following the early writings of Luhmann, but by a process of integrating through abstracting parts of the earlier sentence into the later. This shift from rhema to theme, develops, too, with an intermediary step in the accusative phase: here the connection is mostly created by repeating a phrase from the earlier sentence, or a hyponymic – subordinate expression – or again through causal connectives. Coming back to Luhmann`s 1966 idea of transcending the rational means/end point of view, we can look at this development. There he writes, that "[rhema 1 a so far reaching, functional and dysfunctional, manifest and latent aspects of action apprehending theory of systems-rationality endeavors […] not basically to reach exclusively right solutions.] [rhema 2 with hypothetical connection through auxiliary Would one in this theory oblige oneself previously,] [theme 1 to deliver exclusively right action-rationality,] [rhema 2 connected through causal connective if one is given value-parameters and situational-variables, it] [would be necessary to make strongly simplified and not seldomly unrealistic assumptions.] [hyponymic expression of rhema 2 The capacity for complexity would be reduced a prior by a preliminary deci-

sion and would especially sink below the level necessary for the realm of public administration]" (Luhmann 1966b, p. 100).

In the same way as in the 1968 *Trust*, the critical evaluation of simple rationality moves towards intersubjectivity, the interrelationship between sentences moves towards the mentioned mechanisms of abstraction, or synonymic and context expanding or setting lexical operations of rhema-theme interaction: "[rhema1 One knows or anticipates that there stand, behind all object-experience, possible statements and behind all statements processes of human information-processing and not something like the unchangeable truth of being.] [theme 1 as abstraction or notion of synonymity with These processes are in principal intersubjectively controlled,] [rhema 2 as accusative shall transmit knowledge accessible for everyone] [rhema 2 expansion as contextual comparison and are by this independent of certain societal structures, particularly from higher status based on others, for example religious, political or economic, functions.] [theme 1 These principles of intersubjectivity,] [rhema 3 as possessive context and therefore the detachment of certain pre-given societal structure grants a degree of certainty of assertions and in this contemporary meaning their truths]" (Luhmann 1968, p. 61).

It is just in 1969, when Luhmann published *Legitimation through Proceedings*, where lexical cohesion starts to coincide with what he expressed in *Functions and Consequences of formal Organization*. In the same way as in this 1964 book, goal-orientation as the differentiation of organization and adaption of sub-units, became transparent, Luhmann first mentions three spheres of existence. He writes that "within closer inspection it is possible to recognize in the distribution of complexity onto different, functionally specified procedures a temporal and factual order, which both serve the integration of the overall system" (Luhmann 2017b, p. 245). One special type of rhema to theme shift here is antonymic. Seemingly the underlying structure or the superstructure in this part of a stage is that of ambiguity, synthesis or comitatives. We have already talked about trust using Luhmann`s words, but trust as emotion is considered as a variable to stabilize boundaries, too, by Luhmann in 1964. There he writes that emotions are personality functions and thus at first without social task. However: "[rhema 1 They don`t contain in themselves any guarantee to serve the sustainment of social systems, that they stabilize behavioral expectations for the purpose of the social order, within the scope of institutionalized norms and in harmony with other humans.] [antonymic rhema 2 Nevertheless, emotions can eventually find a personality-improving form, if the social order chances for expression.] [synthetic rhema 3 Thereon knot the possibilities of social-control of emotion-formation]." (Luhmann 1964, p. 373).

The same antonymic and synthetic interlacing is present in 1969, however much more complex. The grammatical markers, the locative and instrumental cases, are present again in *Legitimation through Proceedings*. Proceedings are means by which the interplay of emotion, as frustration or disappointment, and learning is hold within the social sphere. Here, the idea of intersubjectivity as what creates and sustains truth is further elaborated as a certain technique for integration contrary to that of differentiation Luhmann dealt with five years earlier. We can see the antonymic structure of coherence here: "[Rhema 1 The political system of a society can sustain high in-built-complexity and therefore the ability, to bring the not even remotely comprehensible number of fast fluctuating problems of society towards a decision, if it distributes the with it associated carriage of selection.] [Rhema 2 dealing with antonymic perspective An authority, even a hierarchy, could only intake relatively sparse information, could only absorb few contradictions and would decide quite primitive.] [Rhema 3 synthetic Complex systems have to be institutionalized through an interplay, which each operate under different circumstances, labor under different criteria of rationality and put into commission, which however in their

strings presuppose each other reciprocally and are integrated by this.]" (Luhmann 2017b, p. 244).

Within these quoted sentences, one can, too, see how the prepositional phrases as adjectives like "that [preposition with] [adjective growing] social differentiation" grow into prepositional phrases as adverbs, like "[verb put] [preposition into] [noun commission]" or "[verb to bring] [preposition towards] [noun a decision]", where no longer adjectives are modified by nouns, but adverbs modify verbs and other adverbs – giving further information about them. We already pointed towards this, when we said, that the 1964 writing is drenched with cases modifying verbs. Hence integration in proceedings "[locative modification of verb as wherein? is expressed therein]" (Luhmann 2017b, p. 245), when it comes to time, and "[instrumental modification as by which means? ordered through]" (ibid. p. 245) when it comes to the factual definition. By this, both differentiation and integration – again as in the *Formal Organization* – are built up through levels. However, not through systems and sub-systems but through "the differentiation and the reciprocal recognition of procedural-types as components of the overall system [which] are generally institutionalized in abstraction from the interest-situation that determines, in the individual case, the introduction and implementation of a procedure; the concrete coordination of the takeover of past output as input is ensued by a case by case distinction" (ibid. p. 246).

The third, in Luhmann`s writing from 1966 to 1969, is like Deleuze`s idea of a third, which he sees in the structuralists` writings as "not just the real and the imaginary, but their relations, and the disturbances of these relations, […] as the limit of a process in which they constitute themselves in relation to the symbolic" (Deleuze 2002, p. 172), the development of a layer that sees the limitation of the conventional means/end-orientation and mechanic thinking first, through a mode of being aware of "both… and" as well as adapting to non-linear events. Then, as the idea of multi-variate causality beyond simple linear systems, which is before the split and thus the possible institutionalizing of both empirical research into action-theories or "which actions can fulfil certain functions with what kind of follow-up-problems […] and which actions are system-rational" (Luhmann 1966b, p. 92) and can sustain adaption in certain contexts – thus he created a more advanced version of a pluralist goal-orientation. In the third phase intersubjectivity and the enabling condition of trust and familiarity for hermeneutics came into play, which gives rise to a certain truth and a so-called postmodern quasi myth (Angus, 1990) which "makes independent from specific individual interests and coherence of experience" (Luhmann 2014, p. 34). While this third period enables integration, the idea of proceedings goes one step further and not only locates within an identity and creates instrumental means/ends-categories of the temporal, factual and integrative or social order, but elucidates how to sustain a system no longer through only maintaining its differences or boundaries but through "legitimizing itself through proceedings […] which can, within functional differentiation," (Luhmann 2017b, p. 253) achieve "both… and" adaption to their environment and "the justice driven adaption of the environment to the system" (ibid. p. 253). However, in these proceedings, we, can already see parts of the next stage: as similar to the first seeming pluralist book Luhmann published, there is an opening of the inside and outside boundary visible, that is not present in his book *Concept of Purpose and Rationality of Systems*.

In this book, published between *Trust* and his 1969 writing, Luhmann moves away from a value-orientation of what he calls the "transitivity of values" (Luhmann 2016, p. 43), where for him trust and familiarity were on top of an intransitive value-hierarchy – a postmodern myth as we said: one that prioritizes without stating it – informing "informing a value-relation regarding the effects of actions" (ibid. p. 44). Still in the grammar of the third period he writes that "[theme determination of purpose implies, [whom to is the value or whose value that the value of the

intended purpose can,] [context setting as genitive independent of the values or unworthiness of the side effects] [comparison centering around genitive respectively the assigned purposes of other actions,] [preposition as adjective pointing towards a for whom or what? be justifying for an action]" (ibid. p. 44). And by this moves into the differentiation of means and ends or purposes, because, as he says in the fourth period style, [theme purpose-orientation does neither want to negate other values nor tries to generally subordinate them] [locative of wherein within a certain interdependency of preferred values]" (ibid. p. 48) as its "[what is its most instrumental characteristic? functionally most signifying characteristic lies] [three locatives of wherein within its mediating double-posture within the context of causality and within the context of values]" (bid. P. 50). Here, in concordance to the concern for autonomy (Cook-Greuter 2010) of the autonomous stage, "[theme autonomy has to be generated] [instrumental of by which means? through processes of selectivity, which] [preposition as adverbial as by which means? select with the proviso of their content`s information, a system is] [ambivalence − of course always only more or less –] [able to reduce environmental complexity, which means to sustain itself,] [polarization though it cannot completely overlook nor completely control its environment]" (ibid. p. 177).

It is in Luhmann`s 1970 book on *Sociological Enlightenment*, a series of essays he continued for the rest of his life, where this incline between system and environment regarding the degree of available variety and complexity completely moves into a discourse, a relation of two sides of a coding, prepared by the proceedings. As Luhmann wrote there, that once people thought that "that out of non-being cannot rise that which exists, nor out of uncertainty certainty […]. In actuality however, […] the modern society has reached a degree of complexity, through which what was thought as impossible can become possible and therefore has to be thought, too" (Luhmann 2017b, p. 252), but this still needs principles of integration. Or as Jürgen Habermas (1990, p. 165) states in Moral Consciousness and Communicative action "the orientation to principles of justice and ultimately to the procedure of norm-justifying discourse is the outcome of the inevitable moralization of a social world" happening through stage growth. The movement from moral Stage 5 to Moral stage 6 thus is signified for him by shifting from looking for principles to "orientation to procedures justifying norms" (ibid. p. 167).

However, as different Habermas and Luhmann are, later does not start to think about norm-justification but about the justification of systems. Here Luhmann writes that four factors have to be overcome in their isolation and have to be seen in their coherence (Luhmann 2018c). Namely to lay bare the inner correlation of a) differences in perspective between a first and a second person, as incongruities, that serve as causes for adaption, b) latency as disregard for certain aspects of reality to orient towards goals, c) the necessity to move from univariate thinking towards a systems-theory to free the actor from being judged as deliberately ignorant and "living in a really cunning reality, as purely being a beautification of ignoble motives, but as [living within] uncomplete selection, as alto drastic simplification of a much more complicated actuality" (ibid. p. 86) and d) a functional orientation towards sustaining systems in a complex world: to live the idea of enlightenment "as expansion of the human ability to, capture and reduce the complexity of the world" (ibid. p. 81). Sentences here again become simpler – or better said: adapt into a new order of complexity – and nominal in their structure, equation-like or homonymic in their interlacing and referential between rhema and theme through pronominal cohesion, but now don`t hold a "both… and" view but a "both… and… and the relationship of both sides to each other"; we can see this in this passage, where Luhmann thinks about the maintenance of systems at the archaic stage of development through "[rhema 1 'small' problem solutions, quantitatively reduced in regard to both, people and things.] [theme 1 with simple equation-like reference Thereby, and that is structurally very important,] [rhema 2 as "both... and" two strategies of accumulating and accommodating] [rhema 2 the what or relationship

[they are in] stand in functional equivalence and contradiction. They on the one hand provide alternatives and therefore options of reduced complexity; on the other hand, they block themselves]" (Luhmann 2018c, p. 273). As we can see, the two strategies of accumulating and accommodating stand in a relationship which is again a "both… and" of a more intricate kind or as Cook-Greuter (2010) writes: "at the Autonomous stage the identification with polar opposites is still sequential […] [, while] in contrast [at the Construct-Aware stage], the same dichotomy can be integrated, and non-defensively appreciated as two sides of the same coin" (p. 77)

The grammar here fits some of the examples of Susanne Cook-Greuter`s (2010, p. 76) fourth scoring category for the Construct-Aware stage of ego-development, where one has "explicit awareness of perceptions, definitions, labeling, assumptions, frame of reference, paradigms and structure in meaning making. [Which means, one is] aware of the constructed nature of self and reality, of seeing the constructed nature of reality": People who step out of line at work… "[theme 1 as first side of "both…and" sometimes are only that – out of line –] [rhema 1 other side of "both… and…" and other times can help,] [relationship as "both… and" by how and when they step, to redefine a more workable and appropriate line]" (Zavarella 2009, p. 66), "I am… [rhema part one as definition of relationship – a confusing complex of contradictions –]   [rhema part two as "both… ands" both good/bad, assured/self-doubting, aloof/warm at the same time" (Cook-Greuter 2010, p. 77) or "A man`s job… [Rhema 1 as "both… and" relationship notion has traditionally been the role of 'breadwinner', but such simplistic labeling ignores an almost infinite number of possibilities,] [rhema 2 as "both… and" limited only by that man's conceptual model of himself and his world]" (ibid. p. 76).

However, what changes here is not only that there is a permanent awareness of how "both… ands" relate to each other. Besides, with the fourth function coming into play, that of maintaining patterns or self-thematizing, which substitutes the earlier attempts in Luhmann`s Autonomous writing, we can recognize that this assumable Construct-Aware logic looks much more like the fourth period than the writing in 1966. Strictly speaking the "both… and" period of Luhmann`s lifework differs by not using as much an instrumental framing of itself and the pointing to antinomies, but it is primarily about "understanding from" (Luhmann 1966a, p. 10). That points to the third and dative phase, instead of that of instrumentals and locatives.

Intermediate Contemplations

Since we now have dissected one complete grammatical cycle, we can contemplate these findings and add to them more granularity and additional context to place them in an overriding conceptualization of human stagewise development including: a) the fact that each developmental stage to be completed has to run through the four depicted phases, b) that not only the lifework of authors move from nominal to accusative to dative and modifying grammar but, too, a complete stage of ego-development includes all four basic semantic types as well as other models like Kohlberg`s psychology of moral development can be reconstructed in their stage and in-stage distinctions by using them, and c) a fractal structure of tiers, stages and phases that is d) accompanied by elaborating a broad consensus of thinkers at the Construct-Aware or any later stage. Afterwards we embark into a less grammatical but thematic analysis of Luhmann`s second and third phase of his writing marked by the 1984 *Social Systems* and the 1997 *Society of Society*.

For this we first show the interrelationship of the analyzed grammars with other lexico-grammatical components we hypothesize to be part of textuality of certain phases and stages of development. These phases are hypothesized as domain general and thus useful to recon-

struct and reappropriate any existing developmental scoring system as long as one gets the boundaries of their respective levels right. We theoretically offer a model with features that are "necessary and sufficient conditions […] are not accidentally true […], but that are rather rooted in the human 'language capacity,' and thus constitute the innate organization […] of this [human] experience" (Chomsky 2006, p. 24) as universal grammars that relate to multiple other universal hierarchies discovered in linguistics. And thus, they would allow, as Theo L. Dawson (2004, p. 3) writes in regard of the benefits of such universal measures, to "(1) meaningfully compare development across domains and contexts, and (2) examine the relationship between developmental stages and conceptual content".

The first following section, too, exemplarily underpins the fact that each ego-developmental stage has to include all four grammatical phases which makes the Pluralist, i.e. 4.0, and Autonomous, i.e. 4.5, stages two halves of the same stage since both only include half the amount of grammars than all earlier ego-levels do, a fact that we further model in the third section of our intermediate contemplations. Thus, a series of four instead of five stages arises from Expert to Construct-Aware fusing Pluralist and Autonomous. Given that this stage deals with the function of integration we suggest calling it Integrative. For completion we show, too, that Ann Colby`s and Lawrence Kohlberg's (2010) *Standard Issue Scoring Manual* aligns with both the grammatical cycles and the new stage distinctions.

The second subsection of our intermediate contemplations depicts semantics webs and thus points to the multiple paths through the four grammatical phases. It, too, argues for new tier boundaries that pay credit to a) the fact that Pluralist and Autonomous should be combined into one, the Integrative, stage and thus a pattern of four can only unfold when Construct-Aware is included into a tier with the Expert, Achiever, Pluralist and Autonomous stages and to b) the observation that there is rich evidence that part of the Construct-Aware thinker`s predicament is to complete and reflect on the completion of a quadruplicate cycle that mirrors Parson`s and Luhmann`s four phases of adaptive, goal-oriented or differentiating system and environment, integrative and latently pattern maintaining or self-thematizing.

In the third subsection that prepares the voyage into Luhmann`s writings that display Construct-Aware and Unitive stage markers the pattern of fours is included into a larger Tier structure composed of four tiers. This structure can be found in the German philosopher Georg Wilhelm Friedrich Hegel's work as well as in that of the Indian mystic Sri Aurobindo and that can be approached by the terminology given by the American pragmatist Charles Sanders Peirce.

Contemplations on Grammar and Phases

In the 1975 *Systems-theory of Society* Luhmann depicts the level-differentiation of society. He writes that "a meaningful self-thematization of society can only be complete, as long as it projects its object on all three horizons" (Luhmann 2017a, p. 264). Then society becomes "in temporal perspective evolution, in factual perspective systems-differentiation and in social perspective communication" (ibid. p. 264). However, all three layers are communication, given that society for Luhmann is defined later on as letting go of the idea of intersubjectivity "that must be superseded by the concept of a self-referential-closed system of societal communication" (Luhmann 1995, S.50). Already in 1975, he sees the intersubjective just as a certain evolutionary step, a specific social system of society as "the social process of intersubjectivity which is self-constitutive" (2017a, p. 674), and communication as what is a foundational part of evolution. Hence, the third layer he describes under the head of self-thematization is best called integration or the social sphere.

This interplay of three dimensions is, too, a marker for the Construct-Aware stage as depicted by Cook-Greuter (2010) in her Dissertation about *Post-autonomous Ego-Development*. As Ken Wilber writes in *The Religion of Tomorrow*, it is the Indigo altitude, which "possesses all four Quadrants, or dimension perspectives" (Wilber 2018, p. 521), and the Construct-Aware altitude is just one step away of this. Additionally, here Luhmann recognizes self-thematization of systems which can be seen as "the subtle objects majoring to causal [meta-aware] objects" (O`Fallon 2013, p. 20) as an awareness of awareness is a requirement to do so.

Besides this cross-referencing of these three models, and others, with our enactments and observations of the implicit stage structure in Luhmann`s work, we have revealed up to now four grammatical styles which relate more or less to Barry J. Blake`s (2001) hierarchy of relational grammar, the sophistication of bringing together subject, predicates and objects in complex sentences which moves from a) subject, to b) direct object, to c) indirect object and culminates in d) oblique forms with instrumental and locative cases. This natural hierarchy or sequence is paralleled by that of Nominative (Nom) to Accusative (Acc) and Ergative (Erg) to Genitive (Gen) to Dative (Dat) to Locative (loc), to Ablative (Abl) and Instrumental (Inst). But as we have pointed out earlier one has to keep in mind that neither English nor German have all of these cases. Or, as Luhmann writes: one has to see this not as static and linear, but closer to reality "would be the form of a labyrinthic diagram, of an artwork, of a memory, or a note box with multiple entries, centers and choices of routes" (Luhmann 2017a, p. 266) when it comes to depicting the relationship of self-thematization – in this case of consciousness-development and grammar – and the differentiated layers and phases.

Nonetheless it seems useful to point towards additional parallels with linguistic hierarchies. For example studies of childhood lexical development regarding connectives, as Jacqueline Evers-Vermeul (2005) recapitulates in her dissertation, moves through four phases either when it comes to the acquisition of connectives and clauses as well as domain integration: growing from a) positive additive to b) negative additive and positive causal and positive temporal to c) negative causal and temporo-causal before becoming d) adversary.

This hierarchy as labyrinthic processes which we suppose is hypothesized to iterate with each stage as well as within each of the later depicted tiers thus showing the same universal patterns repeating with increased complexity or emergent properties and objects. For completeness a stage moves through four grammatical distinct phases, which overlap and fluctuate as the evolutionary process they are. The grammatical types can be classified through Carlo Quiles`s and Fernando López-Menchero`s (2017) *A Grammar of the modern Indo-European*, William Croft`s (2003) *Typology and Universals,* Kreyer`s (2003) *Genitive and of-construction in modern written English* and Blake`s (2001) *Case*. The phases are demarcated by phrases from Luhmann which originated in the particular phases and point towards their containment in the larger order of Luhmann`s quadruplicity introduced in the introduction to section *3. The Discontinuities in Luhmann`s writings*. Figure 2 depicts the hypothesized fractal structure of phases and stages. In the final section of this article the fractal structure is unfolded across all: phases, stages and tiers.
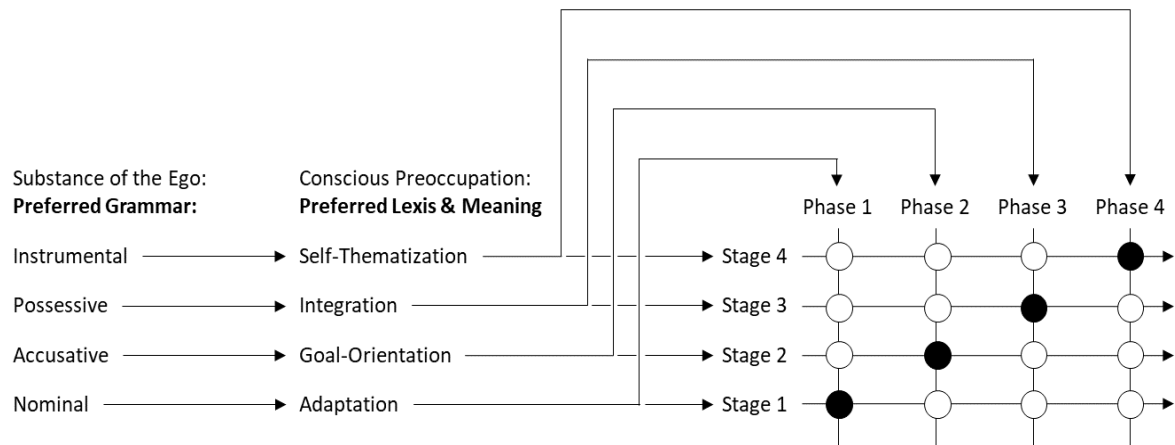
Figure 2. Fractal structure of stages and phases within one tier; the black dots symbolize where stage and grammar collapse - the most essential and stable phase within a stage?

1. A first – adaptative – grammatical phase as the Nominative where "the displacement of complexity from the interior decision-behavior to the system-structures foregrounds yet unknown demands" (Luhmann 1966a, p. 10) where there is only the underlying, the subject, but not as an object: the case of the subject of a sentence and predicate nominative which can be a transitive verb either. It is revealed by the question: "Who or what?"

2. A second – goal-oriented or differentiating system from environment – grammatical phase of the Accusative beyond others serving to review the who or what that is being verbed "the realm of solution-possibility and follow-up-problems" (Luhmann 1966b, p. 105) as direct objects: so to speak, the accusative is the case of these direct objects of a verb. It is also used with many prepositions. It is revealed by the question: "Who or What is being or verbed?" This includes:

   a. The instrumental- or locative-like version which indicates place to which, extent or duration as well as the case which identifies the agent or the intentional performer of an action of a verb.

   b. The ergative-marked noun phrases marking encoding agents.

   c. The Genitive: the variations of the possessive case which relate to subjective and objective or could easily be reformulated into nominal or accusative phrases. They are mostly not noun phrases modifying a noun phrase. They oftentimes, contrary to English, can be formulated as a single compound word in German and can be identified by the question: "Whose? From what or what of?"

3. A third – integrative – grammatical phase of the cases where, at the Autonomous stage, as Luhmann 1968 (p. 10f) points out, "world-plot and own identity, become to him [man] a component of his own system-structure and to a behavioral-basis, in so far as he experiences other people, which actually experience, what is possible for him, and who simultaneously identify him as object, so that he can adopt their point of view and identify himself". This phase seems to be the prerequisite for the subject to object move Robert Kegan (1982) depicts in *The Evolving Self*, namely where "what was immediate becomes mediated by a new immediate […], a differentiation from that which

was the very subject of my personal organization and which becomes thereby the object of a new organization on behalf of a new subjectivity" (Kegan 1982, p. 85). Which contains all cases recognizing to whom something happens or by whom something is possessed or some form of comparative and dependency. Including:

a. The Genitive: the variations of the possessive case which cannot easily be transformed into nominal or accusative phrases. Noun phrase modifying a noun phrase and can be identified by the question: "Whose? From what or what of?"

b. The Accusative: in its forms where it indicates indirect causality and hence substitutes or mirrors the dative as in "identify him as object" versus "identify an object".

c. The Dative: the case of the indirect object. It also indicates possession, and beneficiary of an action. It shows up with ditransitive verbs and parataxic sentences and is revealed by the question: "From Whom? Whom or to What?"

d. The Ablative or Locative which basically indicate a Dative: the source or place from whom or which something comes.

e. The Prepositional: variations as adjectival prepositional phrases leading to comparative structures, contexts as well as denominating the receiver, often of something new, e.g. "is possible for him".

4. A fourth – self-thematizing or pattern maintenance – phase of those cases which all mark the same syntactic relation, that of optional modifiers to the main verb building prepositional phrases as adverbs and expressions, of "instrumental and expressive kind, which serve the solution of system-problems and in this sense the maintenance of systems" (Luhmann 2017b, p. 226). It is the difference of inside and outside, of experience and action and other dichotomies or antinomies that create location, direction and means as well as "meaning that is necessarily bound to this double-structure of selection" (ibid. p. 93). This fourth phase allows one e.g. at the Autonomous stage to be seen as "Identity, which is the means to sustain oneself in a complex and volatile Environment through stabilizing an Inside/Outside difference" (Luhmann 2016, p. 175). Expressing itself through discord and/or as concord and synthesis often in the form of or accompanied by categories e.g. "an instrument" or by "the instrument" or within "the place":

a. The Ablative and Locative forms: the source or place or time wherein or towards which something happened which can be identified by the question: "Whence? Whereto?" As well as either physical or temporal places correlating roughly with prepositions like "in" and "under" thus create inside/outside, means/ends and layers which can be identified by the question: "Wherein? Whereunder?"

b. The Instrumental: the case which signifies the means and the agent present in or while performing an action. It can be identified by the question: "How? With what or using what? By what means? With whom?" And, which includes expressing the agent of the passive and is almost always inanimate e.g. as the "proceedings" of 1969 in contrary to the first and second person "decisions in man and systems" and the "feedback on agents" of 1966a and the 1966b third person direct objects of certain empirical, rational, multivariate "schemes" and the incoming of the human and animate "intersubjectivity" of 1968.

    c. The Prepositional: verbs that take on the form of a prepositional phrase indicating goal or dynamics between differential antinomies or comitatives sometimes followed by accusative as the attaining of a direct object as categories by which something can be intended or wherein something lies.

    As Table 4 shows exemplarily for the Achiever, i.e. 3.5, stage: one can sort through sentence completion items and align them with these phases. Each of the major stages up to Pluralist, the Diplomat, Expert, Achiever, can be sorted using the four phases or a more process like view of multiple grammars adding to each other hierarchically.

Table 4. Four phases within the Achiever or Conscientious Stage of Ego-Development derived from Zavarella`s (2009) Item 27 "People who step out of line at work…".

			Sentence Completion
Phases & Case Structure			People who step out of line at work…
	Phase 1 – Adaptative:	Nominal: "Who or What?"	*…are probably the most interesting.* *…are probably creative.*
	Phase 2 – Goal-Oriented:	Accusative: "Who or what is being or verbed?"	*…should be given a chance to explain their actions.* *…probably have something interesting to say.*
	Phase 3 – Integrative:	Dative: "To Whom or What?"	*…can sometimes have something different and useful to contribute to the organization.* *…are annoyances to the people they work for and should be prepared to seek alternative employment.*
		Genitive: "Whose? From what or what of?"	*…are often doing so to revel against unduly restrictive rules and regulations of their peer group.* *…sometimes have good reasons, others will need a firm word to insure their actions will not be repeated.*
		Ablative: "Whence? From where or whom?"	*…should be talked too, to find out why and if there is something to be learned from either side.* *…should be counseled as to how better to express their dissent while still being respectful of others.*
	Phase 3 – Self-Thematization:	Locative: "Where or wherein?"	*…need to be steered in the right direction and shown the effect their behavior has on everyone surrounding them.*
		Instrumental: "By which means? For which ends?"	*…should not necessarily be punished. The source for their action should be determined and investigated in order to resolve the problems upon which their behavior is based.*

Increasing grammatical sophistication → (left margin vertical label)

As pointed out this approach does not work for Pluralist and Autonomous since the Pluralist stage as depicted by Loevinger and Cook-Greuter synthesizes its meaning on the basis of a nominal and accusative lexico-grammatical web while the Autonomous solely draws on the dative and modification web – thus, taking this approach makes them combine themselves into one stage. This than complete four phased stage, as said, might best be called the Integrative following Charles S. Pierce`s dictum in the *Ethics of Terminology* that the "the first rule of good taste in writing is to use words whose meanings will not be misunderstood" (Peirce 1988, p. 265). Indeed, this is necessary to avoid equivocation and provide "that the different meanings are remote from one another, both in themselves and in the occasions of their occurrence" (ibid. p. 264). Calling it integrative thus serves both ideas inherent in the dictum: firstly, it clearly shows the distinctiveness from the ego-development trajectory discovered and advanced successively from Loevinger, to Cook-Greuter and finally O`Fallon and secondly it pays credit towards the trajectory depicted by Parsons and Luhmann as well as many others as shown later.

By this the scope of this Integrative stage matches moral stage 4/5 and moral stage 5 as depicted in Lawrence Kohlberg`s (2010) *Standard Issue Scoring Manual for the Measurement of Moral Judgement*. As Table 5 (below) exemplarily shows, early versions of a moral stages tend to use nominal and accusative grammar, while later or second half version tend towards dative and modifying grammar – of course these are tendencies with some exceptions of crossing over into earlier or a bit later grammar, within a quarter of this four phased growth cycle. The examples in Table 5 stem from answers on the Heinz Dilemma, where a husband has to either steel a drug to save the life of his wife or passively watch her die.

After we now took a look at an expanded scheme of the grammars introduced under the heading *2.b.i Within a Sentence: Subject. Predicate, Object Variations*, hypothesized about the interconnection of them with other linguistic hierarchies and hypothesized a fractal structure of the overall developmental scheme and measuring scale we have shown the existence of all these grammatical types as a way to sort through sentence-completions of the Achiever, i.e. 3.5, stage of Ego-Development via increasing grammatical complexity. This served as an exemplary representation for the variety of lexico-grammatical overlays a stage should include for having the whole four phased range our proposed domain general scoring metric suggests as the universal width of a stage. By way of example we additionally have shown how Lawrence Kohlberg`s (2010) scoring scheme uses the same direction of growth throughout a stage however, not four phased but each stage split into an early and late version. The next section will give even more granularity to the grammatical superstructure or substance of each potential ego on the path of self-discovering a trajectory that is, too, depicted through the terminologies of more than a dozen scientists and philosophers in the following.

Table 5. Responses on the Heinz dilemma and their Grammar in concordance with levels of Ego-Development.

			Question on Moral Dilemma
Case Structure & Stage			Would a good husband think it is his duty to steal and Why?
Expert	Stage 2/3	Nominal and Accusative: "Who or What?"	[*Nominal part* Well, I think it would if his wife is going to die,] [*Accusative part* he wouldn`t have much choice.] (Colby & Kohlberg et al. 2010, p. 19)
Expert	Stage 3	Instrumental and Locative: "Where or wherein? By which means?"	[*Nominal part as adjectival instrumental: "how was he?"* He should not have been so selfish] [*Comitative part with possessive* with that drug of his, and I think Heinz did right] [*Locative part as time* when he did break] [*locative part as interior* into that store] (ibid. p. 22)
Achiever	Stage 4/3	Nominal and Accusative: "Who or What?"	[*Nominal part as genitival accusative* Because it is a matter of life and death,] [*Accusative part* it gets down to a matter of life and death,] [*Accusative as temporal subordinate* then you are balancing the financial greed of one person against a life.] (ibid. p. 32)
Achiever	Stage 4	Instrumental and Locative: "Where or wherein? By which means?"	[*Nominal part as locative: "in"* We like to believe there is something special in a human being,] [*Dative part as possessive* perhaps some spark of the divine,] [*Comparative part* something like this which it is wrong to kill.] [*Nominal part as locative: "within"* This is something within a person] [*Instrumental part: "by which"* that raises him above an animal, which removes him from being treated like an animal.] (ibid. p. 47)
Pluralist	Stage 4/5	Nominal and Accusative: "Who or What?"	[*Nominal part* The commitment to another person] [*Accusative part: series of accusatives* which involves a total commitment and, in a sense, he is taking the action because she cannot take it herself,] [*Nominal part: a third which holds "both… and"* in the sense of a marriage being this kind of thing, something in two bodies][*Nominal part: conjunctive as equation* and in that sense there is not much difference in terms of responsibility of her] [*Accusative part* trying to do something for him.] [*Nominal part as both and* That involves a commitment to each other and, too, some kind of form of life or something like that] (ibid. p. 49)
Autonomous	Stage 5	Instrumental and Locative: "Where or wherein? By which means?"	[*Nominal part as locative* …it revolves around what I was saying just now about rights] [*Comitative part* that kind of go with a human being,][*Adversative part* but really those rights have been defined] [*Instrumental part: "by which means?"* by us as people, by agreements that we reached through some kind of social process…]

Contemplations on Semantic Webs

Terri O`Fallons stage theory is based strongly on the use of passive and active language. However, as we can see simplified in Table 4, the accusative phase of the active 3.5 or Achiever stage can take on passive form – there should be "given a chance" But more intriguingly is what happens in the dative or genitive phase where semantic structure allows the adding of some sort of a beneficiary by growing into a grammatical form which existed in Kalkatungu, an extinct Australian Aboriginal language, sometimes called the anti-passive. This term is derived from the recognition that it "is a derivation that allows access to the privileged relation" (Blake 2001, p. 57), to become not only patient but beneficiary – the object to a new subject, so to say, that might be outside of oneself. It is similar to cases like the beneficiary applicative and the instrumental or comitative applicative, where a participant of a sentence is advanced to assume the grammatical relation held by the patient including typical instrumental or comitative markers, too, to move for example "the internal orientation from patient into a manner" (Martin 2000, p. 392) or purpose expression or a direct object is stated in a way that it is a possible passive subject, e.g. "[passivized stepping out of line The source for their action should be determined and investigated] [purpose or reason for being passive in order to resolve the problems upon which their behavior is based]". It creates a move from actor or reflexivity to beneficiary.

But again, this is part of a larger hierarchy, where each phase can show a unique sort of passive structure complementing its active variations. This hierarchy of universals, too, forms a "semantic field with various diachronic and synchronic connections between all of the three [later, b) to d)] categories" (Gast & Siemund 2006) from a) intensifiers like "the most" including anti-causative or de-objective as passive and intransitive verbs to b) reflexivity e.g. in "given a chance to explain their actions" with impersonal forms of passive and transitive verbs, c) referential disambiguation, or variation of context, accompanied by adnominal intensifiers leading to so-called emphatic reflexivity like in "[the identity of accidents constitutes what signifies the temporal problematic of accumulation, namely the progress of the present as an ever actual moment, which cannot automatically] [adnominal intensifier 1 carry itself what it accumulates, rather has] [adnominal intensifier 2 with ditransitive verb to seek itself retention and accession]" (Luhmann 2014, p. 17) and di-transitive verbs – verb forms followed by two or more objects allowing for natural reciprocity – to d) role disambiguation through actor-oriented intensifiers, which are used to relate a proposition to a set of alternative propositions and by this create an 1) actor-role assigned to 2) an actor or instrumental category 3) other than the referent, thus managing full reflexivity by having 4) "a different thematic role in the alternative propositions, e.g. that of an external causer or beneficiary" (Gast & Siemund 2006, p. 14). A case form we can observe in Luhmann's 1969 writing: "[proposition 1 Thus far as systems start to orient on the basis of temporally distant effects] [actor-oriented intensifier by themselves,] [proposition 2 where system is negative beneficiary well, in regard to purposes, the present in itself becomes problematic]" (Luhmann 2017b, p. 226). This structure is contrary to the intransitive verbs of the first phase, too, signified by so-called derived intransivity expressing itself e.g. through "orient by themselves" which contrary to "to seek itself retention" lacks any necessity for an object, like intransitive verbs in the first phase do, either. The possibilities for expressed grammar are manifold and suggest that there are many variations of each stage including passive and active versions of grammar.

Obviously, the manifold possibilities opening up between the realm of lexis and that of grammar lead to certain lexico-grammars which carry the discourse of a culture within a certain stage as variations or differences and reappropriations. Exemplarily this can be shown using Luhmann`s (2016) depiction of a sequence of cause, effect, the values to whom both

cause and effect exist and the judgment of means/ends by combining it with Martin Haspelmath`s (2003) semantic web for dative constructions from *The Geometry of Grammatical Meaning*. We can see the drawing, in Figure 3. This table illustrates some of the markers we have mentioned so far and how they can form different types of dative, using different indirect objects, in the third phase to depict the non-linearity and labyrinthic possibilities of grammar.
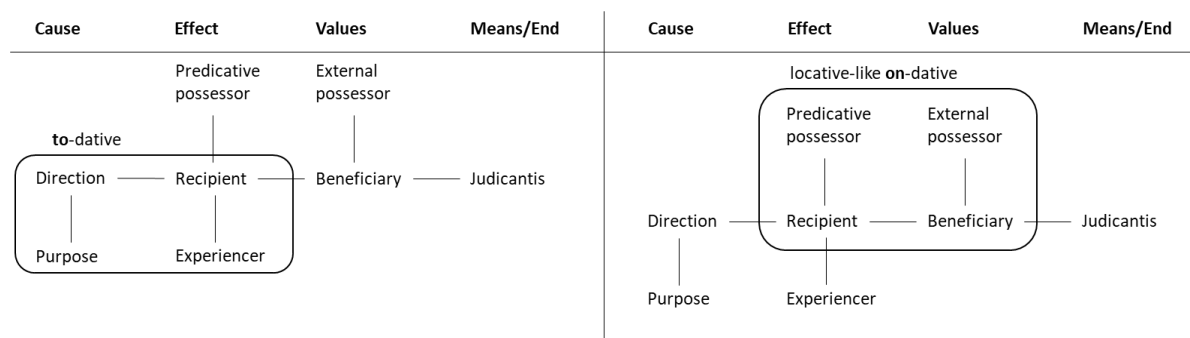
Cause	Effect	Values	Means/End	Cause	Effect	Values	Means/End

Figure 3. Approximate Semantic Web for different Dative-Types; based on Haspelmath (2003) and Luhmann (2017b).

Furthermore, Figure 4 (below) sums up some of the markers regarding the phases, portraying them as a fractal of stages, phases, grammars and content as conscious preoccupation directed towards different modes of character development and interpersonal style.
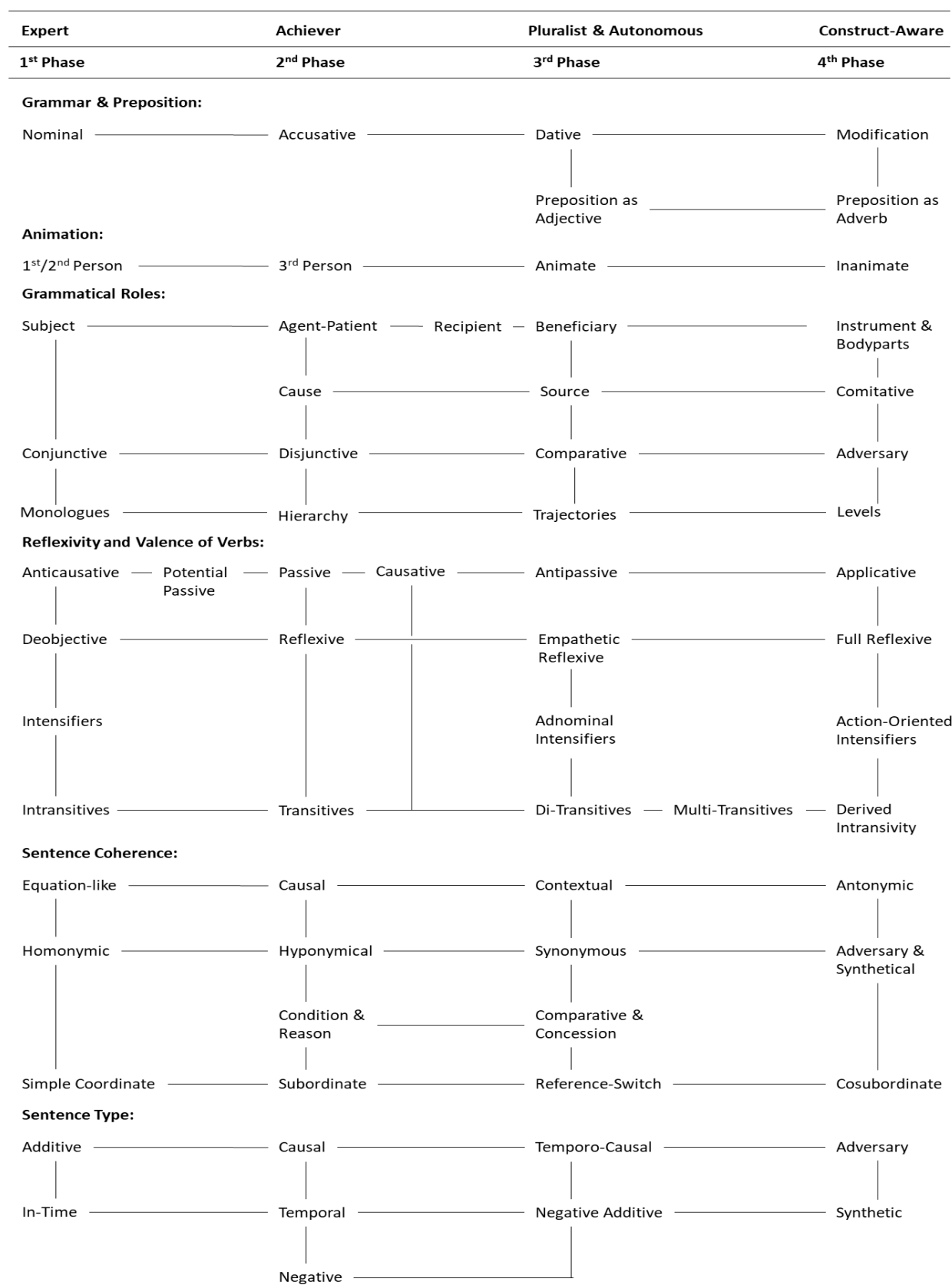
Expert	Achiever	Pluralist & Autonomous	Construct-Aware
1st Phase	2nd Phase	3rd Phase	4th Phase

Grammar & Preposition:

Nominal	Accusative	Dative	Modification
		Preposition as Adjective	Preposition as Adverb

Animation:

1st/2nd Person	3rd Person	Animate	Inanimate

Grammatical Roles:

Subject	Agent-Patient — Recipient —	Beneficiary	Instrument & Bodyparts
	Cause	Source	Comitative
Conjunctive	Disjunctive	Comparative	Adversary
Monologues	Hierarchy	Trajectories	Levels

Reflexivity and Valence of Verbs:

Anticausative — Potential Passive	Passive — Causative —	Antipassive	Applicative
Deobjective	Reflexive	Empathetic Reflexive	Full Reflexive
Intensifiers		Adnominal Intensifiers	Action-Oriented Intensifiers
Intransitives	Transitives	Di-Transitives — Multi-Transitives —	Derived Intransivity

Sentence Coherence:

Equation-like	Causal	Contextual	Antonymic
Homonymic	Hyponymical	Synonymous	Adversary & Synthetical
	Condition & Reason	Comparative & Concession	
Simple Coordinate	Subordinate	Reference-Switch	Cosubordinate

Sentence Type:

Additive	Causal	Temporo-Causal	Adversary
In-Time	Temporal	Negative Additive	Synthetic
	Negative		

Figure 4. Hypotheses about Stages, Phases and a Semantic Web depicting some of the Grammars.

Contemplations on Stage Patterns

We hypothesized before that even though Terri O`Fallon`s stage theory proposes not only, and applies in its measurement, four phases but, too, offers overarching pattern of passive, active, reciprocal and interpenetrative, that her pattern within what she calls the subtle tier ends with the third phase of Parson`s and Luhmann`s patterns – as well as after three complete grammatical cycles not four. We can only exemplarily show that both stages basically have a "both… and" point of view, that only matures from nominal and accusative – the Pluralist – towards dative, possessive and modifications – the Autonomous – instead of a qualitatively distinct mode of operation and conscious-preoccupation with a new object and meaning within the quadruplicate scheme of adaptation, system and environment hence goal-orientation, integration and self-thematization. Table 6 depicts this exemplarily for two different modes of using the grammatical overly of "both… and": a positive as well as negative scheme and a two positive sides of what would be a polarity at the Achiever stage.

Table 6. Difference and oneness of Pluralist and Autonomous depicted by examples from Miniard 2002, p. 60ff.

	Pluralist/4.0 responses including Nominative & Accusative:	**Autonomous/4.5** Responses including Dative, Possessive & Modifications:
Three meaningful and differential components as "both… and" as positive & negative:	A good boss… [Theme as first side of pole: positive as Nominative: "Who or what?" *Demands excellence*] [Rhema 1 as second side of pole: Negative as Accusatives: "Who or what is being or verbed?" *but provides for the development of the skills and attitudes*] [Rhema 2 as Accusative: "Who or what is being or verbed?" *necessary to achieve it.*] (Miniard 2002, p. 61)	A good boss… [Theme as first side of pole: positive as Accusative: "Who or what is being or verbed?" *keeps lines of communication open and provides direction for activities*] [Rhema 1 as second side of pole: Negative as Locative-like Dative: "Onto whom or what?" *without impinging on the employee's own abilities & desire*] [Rhema 2 as Possessive: "Whom or what?" *to direct their own activities.*] (Miniard 2002, p. 70)
Three meaningful and differential components "Both… and" as two positive poles:	A good boss … [Theme as Nominal "both… and": "What?" *both supports and challenges,*] [Rhema 1 as first side of a pole – supervises: Accusative: "Who or what is being or verbed?" *uses a variety of supervisory methods and*] [Rhema 2 as second side of a pole – diversity or freedom: Accusative: "Who or what is being or verbed?" *cherishes diversity.*]	A good boss… [Theme as Instrumental Categories: "Has which means?" *has a clear sense of self and a vision of a future state – both*] [Rhema 1 as first side of pole: Comitative: "With whom or what?" *which are compatible with colleagues, co-workers and with the organization*] [Rhema 2 as second side of pole: Instrumental: "through which means?" *and which are conveyed to others through example, not words.*] (Miniard 2002, p. 70)

We already pointed towards the end of Terri O`Fallons iterating cycle in the subtle tier with Luhmann`s third and fourth phase within the Integrative stage of his life work, i.e. within

the Autonomous stage, when we, too, pointed to Kant`s way of integrating inside and outside. Most famous for dealing with projections is Carl Gustav Jung. When he writes in *AOIN Research into the Phenomenology of Self*, that "although, with insight and good will, the shadow can to some extent be assimilated into the conscious personality, experience shows that there are certain features which offer the most obstinate resistance to moral control and prove almost impossible to influence. These resistances are usually bound up with projections, which are not recognized as such, and their recognition is a moral achievement beyond the ordinary" (Jung 1970, p. 9), Jung moves seemingly exactly from a fourth-phase grammar, using adversative conjunctions as well as locative and comitative modifications, into a more nominal style of the early Construct-Aware, i. e. the 5.0 stage of O`Fallons model characterized by an "insight around projections in one`s interior experienced in the moment. The witness (awareness of awareness) is activated and it becomes aware, in the moment of projections arising" (O`Fallon 2010, p. 60).

Looking at Luhmann`s understanding of his four phases adaption or the temporal dimension and self-thematization as the maintenance of identity show up as opposite sides of a coin, as major polarities or antinomies: While "adaptation as a learning process, reflection [as self-thematization] is a constituting process. In the process of adaption contingency has to be understood as 'dependency from…'. Within the process of reflexivity contingency has to be understood as non-necessary possibility. Classically framed: Causality and freedom are not mutually exclusive, rather different expressions for the process of contingency" (Luhmann 2017a, p. 920f). So, there arises less the iterating movement from passive to active and the passive receptive to the active interpenetrative but more of a polarity between the first and the last and that of individual goal-orientation and integration.

That reminds of the great polarity Friedrich Georg Wilhelm Hegel (2011) points out in his *Encyclopedia of philosophical Sciences*, when he comes to his perspective on psychology and the subjective as well as the objective mind. In the passages about the objective mind he spans a trajectory of moral maturation from right or law, over morality towards the ethical life. The sphere of right subsumes or synthesizes two types of psychological functioning: the consciousness which has the soul as its object and the mind "which declared itself to the truth of the soul and the consciousness" (Hegel 2011, §440). Within the right the free will of mind, which has its destination still on the outside, has to direct its means towards the end of ownership. This is only possible based on consciousness which itself is, "by itself and for itself, the change of the object. Consciousness appears therefore differently established determined following the difference of the objects" (ibid. §415) and is in its more mature form of self-consciousness an "I = I […] in which the I merges with itself [as on object of desire] and becomes satisfied by this, becomes a real" (ibid. §§424 & 428). It is like Luhmann`s view on adaption as it is adaptative and dependent on what is in both "the subject and the object identical" (ibid. §415). Consciousness matures towards reason and the mind, which as free will "directs its inner destination and purpose on an externally found objectivity" (ibid. §483), and from an orientation towards right into morality. But as morality is based on an "infinity of subjectivity" (ibid. §511), on the recognition of the uniqueness or specialness of everyone, it creates both a highly relative world and the need for relational modes of understanding. Hegel (2011) mentions dialectics as such a proceeding but as Karl Ott Apel (2016) points out in his essays on *Discourse and Responsibility*: there is a necessary and next step which is especially grounded "in the Hegelian presupposition for the possibility for truth" (Apel 2016, p. 72f). This possibility for truth shows up in the *Encyclopedia* as "the truly ethical life […] [where] the disposition of the individuals is the knowledge of the substance and the identity of all its interests with the whole" (Hegel 2011, §403). Here, the individual and self-conscious freedom is directed as "un-intermediate general reality and simultaneously custom […] to create both

through its occupation" (ibid. §514). This ethical substance can, too, be called trust: as each knows anyone else only within the shared whole and as shared identity. It is again and in the same way as for Luhmann a oneness of inside and outside, but where it first came from the outside towards the receiving end of the inside it is now the inside or shared substance which is directed outwards.

One can find this pattern in the writing of the Indian saint Sri Aurobindo, too. At the end of the trajectory of separate self is an intermediate stage which is not yet completely spiritual but no longer completely mental either: the higher mind. "This higher mind is able to perceive and deal with other souls as other forms of its pure self" (Aurobindo 2005, p. 181) in the same way as for Hegel the truly ethical life arises, when "inside touches inside". More mundane formulated by Kohlberg: being at moral stage six means having "the perspective of any rational individual, that acknowledges the essence of morality or acknowledges that any human contains within itself its end-purpose and has to be treated accordingly" (Kohlberg 1996, p. 132). This reverberates what Abraham Maslow (1993) considered extraordinary in the rare individuals he discovered and named self-actualizing. "They tend to agree about what is right or wrong, as if they were perceiving something real and extra-human rather than comparing tastes that might be relative to the individual person" (Maslow 1993, p. 9). Not only has Kohlberg four abstract stages, but Abraham Maslow, too, creates a seriality of four distinct modes of psychology: namely as first behaviorism, as second the cluster originating in Freud, and the "'Third Force' […] that includes the first and second group" (ibid. p. 4) as humanism plus the fourth of transcendence. Aurobindo, as well, one might suggest has a four-phased pattern as the higher mind as the intermediary integrates the mind proper which "is divided into three parts—thinking Mind, dynamic Mind, externalizing Mind – the former concerned with ideas and knowledge in their own right, the second with the putting out of mental forces for realization of the idea, the third with the expression of them in life" (Aurobindo 2012, p. 177). For this mind proper, there, too, again is an intermediary necessary – the mental vital, connecting the mental with the physical life.

As Hegel (2019a, p. 746) himself writes in the *Science of Logic* "the term counted as third can also be counted as fourth, and instead of a triplicity, the abstract form [of dialectics out of thesis, antithesis and synthesis] may also be taken to be a quadruplicity; in this way the negative or the difference is counted as a duality". Despite Hegel himself staying with the form of triplicity for esthetical reasons or because "it is this unity, or that the entire form of the method is a triplicity, is indeed nothing but the merely superficial, external side of cognition; […] because it has always been recognized to be the universal form of reason" (ibid. p. 746f), the Slovenian philosopher, cultural critique and lacanian psycho-analyst Slavoj Žižek (1999), too, extracts this quadruplicity in his book *The Ticklish Subject*. This leaves us with a tier pattern as depicted in Table 7 which is according to Žižek (1999, p. 80) "the longing for reconciliation with a lost totality, […] the fourth moment, ethical substance, 'second nature'". We depicted the phases including some of the here mentioned authors, to show, how theses phases are reappropriated in different and unique ways with even using the same words for other phases. As shown semantic webs can take on different form thus different people supposedly perceive same a prior grammar through a different lexical field.

Table 7. Patterns of the phases based on Hegel 2011 and Luhmann`s life work in comparison to other authors mentioned during the course of this article.

O`Fallon	3.0	3.5	4.0 & 4.5	5.0
Cook-Greuter	3/4	4	4/5 & 5	5/6
Angerer	1st Phase	2nd Phase	3rd Phase	4th Phase
Pattern	Thesis	1st Negation	2nd Negation	Synthesis
	Outside as Inside	Inside-Out	Outside-In	Inside as Outside
	Pure Subject	Individual	Systems	Shared Substance
Hegel	*Subjective Spirit*			
	Consciousness			
	Self-Consciousness	Mind		
		Objective Spirit		
		Free Will	Subjective Will	Substantial Will
		Rights	Morality	Ethical Life
	Other for Other	Despotism	Relationality	Intersubjectivity
Parsons	Adaptation	Goal-Orientation	Integration	Pattern Maintenance
	Cognitive Mode	Evaluative Mode	Value-Orientation	
Luhmann	Communication	System-Environment	Integration	Self-Thematization
	Temporal	Factual	Social	Identity
	Incongruency	Latency	System-ness	Functionality
Kant (first Critique)	Time	Space	Self-Consciousness	
	Receptivity	Spontaneity	Intuition	
	Inherence and Subsistence (substantia et accidens)	Causality and Dependence (cause and effect)	Community (reciprocity between agent and patient)	
Kohlberg & Habermas	Conventional: Incomplete Reciprocity and Duty vs. Inclination		Post-Conventional: Complete Reciprocity and Autonomy vs. Heteronomy	
	Stage 3: Good Social Relationship	Stage 4: Maintaining the Social Order	Stage 5: Social Contract	Stage 6: Discourse Ethics
Maslow	Behaviorism	Freudianism	Humanism	Transcendence
Loevinger	Cognition	Character Development	Interpersonal Mode	Conscious Preoccupation
Aurobindo	*Separate Individual*			
		Mind Proper		*Almost Spirit*
	Externalizing Mind	Dynamic Mind	Thinking Mind	Higher Mind
Whitehead	Conceptual Origination: Adjustment of valuation	Physical Origination: Actuality but deficiency in the solidarity	Perfected Actuality: Oneness without loss of individuality	Self-completion: Each actuality included as fact of relevant experience
	Actual Entities	Eternal Objects	Substantial Activity	God
	The things to be received	The act of perception	The manner of reception	The subjective purpose
Sartre	Isolation	Reciprocity	Interpenetration	Collective Praxis
Derrida	Openness for Perception of World	Now of Consciousness facing an Object	The Present Tense of Discourse	Surface of Envisaged Presence
De Chardin	Centering everything partially upon oneself	Being able to center oneself upon oneself constantly	Being brought into association with all the other centers	Birth of some single center from the convergent beams of million centers

Preliminary Contemplations on Tier Patterns

However, for Hegel " the subjective spirit and the objective one are [only] seen as the way through which […] the absolute spirit as reality that is equally eternal in itself as it is return-ing and returned Identity; the one and general substance as spiritual […] as the certitude of the objective truth" (Hegel 2011, §§553-555). It is itself not only holding together the subjective and the objective spirit, but is, too, the culmination of a trinity of layers called being, essence and notions – for many reasons we simplify here again. Notions are generalized and enduring interpretations and culminate in ideas which are truth in itself and for themselves but these notions and ideas are "still the idea in its subjectivity, and hence in its finitude in general. It is […] [their] purpose that ought to realize itself, or the absolute idea itself still in its appear-ance" (Hegel 2010, p. 696). The absolute idea alone is for Hegel (2010, p. 735) "being, imper-ishable life, self-knowing truth, and is all truth". And that especially as it brings together the ideas and notions with being – the seriality of phenomenological appearances – as well as with essence – the moment where being becomes mediated with itself through another, the negativity of itself.

For the founder of pragmatism, Charles Sander Peirce (1998), these three layers can be called firstness, secondness and thirdness or the ideas of first "a Quality of Feeling […] [, and] of that which is such as it is as being Second to some First, regardless of anything else […] that is to say, it is Reaction as an element of the Phenomenon […] [while] the Third is the Idea of that which is such as it is as being a Third, or Medium, between a Second and its First. That is to say, it is Representation as an element of the Phenomenon" (Peirce 1998, p. 160).

For Luhmann (2018b) society or first order observations can be considered as some kind of third, or the interpretant between phenomenon, hence communication and the reactions, the differences and identities of systems. However, for Luhmann a truth as that which Hegel points to, does not exist, neither a pragmatic consensus as Peirce thinks of, when he points to his categories. While the first order observer ends with notions, "statements about invariant foundations, about nature and necessities […] [, while for the second order observer] anything that the first order observer observes […] depends on the distinctions which where underlying the observations; and it always can be different distinctions" (Luhmann 2018b, p. 1121f). There is a contingency for the second order observer, which it, contrary to the first order ob-server, can choose where it creates latency and blind spots and thus to it "the world appears as constructions based upon different distinctions" (ibid. 1122).

Though, for Luhmann no truth exists but anything, whether called subjective or objective, accidental or substantial, truth or lie, actual or possible, is contingent, the reduction of an in-comprehensible complexity, "which increases the probability of the desired and decreases the probability of the undesired" (Luhmann 2016b, S.98f), anything can be marked as true through observation: "the management of differences" (Luhmann 2012, p. 63). Despite that old conflict – which we already mentioned into the introductory paragraphs of this article, between structure and genesis, patterns and differences, substances and accidentals, insides and outsides, the possibility for truth and construction reaching from the inception of time to these great thinkers, we are now up to explore Luhmann`s path into the realm of second order observations – by this we will point to some important differences between both views, or as Wilber (2018, p. 681) puts it: each holon "can be looked at from 'without,' or from the 'out-side' in an objective/universal/rational stance, or looked at from 'within,' or from the 'inside' in a subjective/local/cognitive/enacted stance" – and we attempt to do both for better compre-hension.

In the succeeding section, Luhmann`s writings after 1980 can be classed at least into two stages each completing a circle of four grammatical phases above the Construct-Aware: a) where ideas are primarily concerned about the way differences and unities are created through observation and later b) how observations deal with paradox to create cognitive, subjective and constructed internal identity. In the following paragraphs we will no longer point too much to grammatical markers. We will restrict ourselves to mentioning the phase wherein the textual examples could best be put and how the conscious preoccupation, interpersonal mode and identity-formation evolve and change with the distinguishable semantics. Respectively sections are no longer translated with the same grammatical accuracy but towards optimizing the reading flow. Additionally, to locate the tier sequence from being, to essence, to notions and absolute spirit or from firstness, to secondness, to thirdness and beyond into Luhmann`s realm of second order observations within a broader reality we reference not only other thinkers seemingly from these stages but some concepts from earlier stages, too. As thorough these classifications are as thorough should be the caution when reading these assessments, as no one is free of stepping into misjudgment, e.g. for reasons of transference.

Construct-Aware and Unitive

The Early 1980s: Entering Unitive

As we have seen, the move into the integrative phase of Luhmann`s writing was signified by a loosening of the boundaries created by the subordinating mechanisms and the latency or displacement and repression mechanisms of a system out of subsystems which marked the exiting phase of the Achiever stage. The boundaries are loosening their hierarchical mode and "drawing of boundaries does not necessarily mean less communication, in general even rather an increase, as the passage is specified and thus eased up" (Luhmann 1966a, p. 85) – communication channels become clear and therefore accessible. However, this interplay of subject and object takes on different forms and is further increasing in 1970. The interaction of inside and outside there could for example mean that systems can "reach 'ultrastability'. They can stabilize internal boundaries between sub-systems in the meaning of thresholds, which restrict a transmission of effects – […] therein lies a substantial speeding up of intra-systemic adaptive processes, an important temporal gain for survival. This initially enables the emergence and maintenance of higher order systems. […] in a more complex world" (Luhmann 2018c, p. 159f). And thus, there is a deep relationship between two sides of reality: the completely inside and the completely outside in their combination as unity. Or as Alfred North Whitehead (1978, p. 148) says "every item of the universe, […] is a constituent in the constitution of any one actual entity" or of any particle, life-form or system of any kind. For him, too, this completion of inside and outside or rather anyone and anyone else is part of a four-phased process wherein "the creative action completes itself [in the fourth phase] […] for the kingdom of heaven is with us today […] [, which] is the love of God for the world" (Whitehead 1978, p. 354).

It is exactly ten years later when Luhmann starts with *Societal Structure and Semantics* both a new series of books and the next nominal or adaptative phase. Here, we still cannot see the term of observation substituting self-thematization, but a new degree of complexity when it comes to his recognition of the "others as other", of first to second person interactions: "the differentiated states [here] are not in relation to each other, but historically in relation to the earlier state functionally equivalent. Exactly that allows the substitution in direction to functional differentiation; it is functional substitution of functionally for each other no longer substitutable states. The differentiated states then align by this that they can only jointly substitute an earlier one, on whom they themselves depend" (Luhmann 1993, p. 169f).

What we can see here is that the nominal function takes on different means: it is the switching between antonyms or the expression of two parts formulated in opposition but union, a sentence of adversaries in an instance – inclusion of others as other means therefore "[Rhema 1 Fully differentiated behavioral complexity has to be introduced into society again] [Rhema 2 stating the opposite and by this has to be made compatible with these behavioral competencies, against which they have been differentiated]" (ibid. p. 170). Or as Jacques Derrida (2007) writes, this phase deals in a paradoxical fashion with the *Inventions of the Other* "the other is indeed what is not inventible, and is therefore the only invention of the world, our invention, the invention that invents us" (Derrida 2007, p. 45). As Jean Piaget (1956, p. 246) points out "reciprocity is the fundamental relation which one finds within each totality" and here the adaptation starts with a whole new kind of it, leading to new and "more complex relationships of inclusion, interference, negation, etc." (ibid. p. 236) that are in themselves and by their nature antonymic.

This structure thus looks like the fourth phase moved into an extreme. Additionally, it shows up on the surface of Susanne Cook-Greuter`s Unitive stage, too. Hence, being with other people can in the more accusative to dative phase mean that it "[Rhema 1 is not necessarily dependent on proximity (distance) – or time for that matter.] [homonymic hyponymic theme One could be next to someone and not 'be with them'.] [homonymic synonymic rhema 2 'Being with' seems more like realizing that an 'other' is somehow part of 'you',] [homonymic rhema 2 as antinomy and 'you' are part of 'them' – if only for a moment]" (Cook-Greuter 2010, p. 80) and the dative to instrumental phase brings forth a feeling of feeling sorry "[Rhema 1 as antinomies for everyone and for no one –] [equation-like preceding rhema 1 all of us suffer, and much of it is self-created...] [rhema 1 antonymic part yet none of us is ever really in danger at the level of the Absolute] [rhema 1 beneficiary applicative as ablative and there is potential good that can come from whatever we are experiencing right now]" (Cook-Greuter 2011, p. 16).

Not only in these sentence completions we can see the arising of a new "I = I" in the Hegelian sense, where the subject is merely the same as the object but Luhmann, too, says "that through present communication the pasts and the futures of other persons […] can be made present. As different persons provoke each other's actions reciprocally, the temporal horizons of simultaneous or quasi simultaneous events melt together. The temporal horizons or action events become relieved from the sequentialization through one continuity of consciousness. They, only that way, gain the form of a horizon that can be supposed as intersubjectively-common. The time becomes separable from events, on which meanings it arises, and wins the form of a (culturally interpretable) world-dimension" (Luhmann 1991, p. 257f) or as Hegel would put it: a place "where the spirit […] [as a history] becomes, too, for itself a general of the external, becomes the world spirit" (Hegel 2011, §549). But, Luhmann in this essay on *Temporalization of Complexity* still displays a large number of markers pointing towards a fourth phase of the earlier – as shown Construct-Aware – stage of his writing.

Luhmann sometimes not experiences permanently or – as Terri O`Fallon (2010, p. 19) might write: "rocks back and forth" – points towards this experience of a shared conscious world-dimension, with a presence or independence from one single, isolated experience of time. It is a sort of prophecy of a new sphere or as he puts it: "[rhema 1 as thesis A further differentiation of events […] never ends with a new, perhaps timeless dimension of elements,] [rhema 2 as antinomy even though one has to confess to the mystics, that the infinity of progress into the small matches the infinity of the progress into the large] [rhema 3 as synthesis and one insofar can find eternity in each moment]" (ibid. p. 244).

This idea of touching into a new dimension of freedom can, too, show up in Construct-Aware sentence completions: a good boss for example "[rhema 1 thesis is able to unleash the potential and abilities of staff] [rhema 2 as comitative and instrumental applicative by creating a situation in which they choose willingly to live of their best, having a clear understanding of goals, roles and their unique combination,] [rhema 3 as synthesizing context pointing to something "unknown" as within a supportive, challenging and ultimately liberating environment]" (Miniard 2002, p. 72) and is typical for Hegel's *Phenomenology of Spirit*, too. There, in certain moments, absolute spirit shows up, for example in a moment of forgiveness, where "[rhema 1 the word of reconciliation is the objectively existent Spirit,] [rhema 2 as comitative with antinomy which beholds the pure knowledge of itself qua universal essence, in its opposite, in the pure knowledge of itself qua absolutely self-contained and exclusive individuality –] [rhema 3 as synthesis a reciprocal recognition which is absolute Spirit]" (Hegel 1977, p. 408).

For Hegel in his, let`s name it, "late Construct-Aware writing" anything is full of meaning, both, good and evil "[rhema 1 as synthesis are purified into the unity in which there is no longer in them any existence devoid of self, any negative of consciousness,] [rhema 2 as pole one where on the contrary, duty is the unchanging identical character of its self-knowledge,] [rhema 3 as pole two and evil equally has its purpose in its being-within-itself, and its actuality in its utterance]" (ibid. p. 408) and thus synthetize each other in their mutually defining, restricting and contrary existence as a self-conscious relationship. This structure of Hegel`s philosophy of religion, where a home or place for both sides of the reality-coin exists, is analytically pointed to in Luhmann`s 1977 *The function of Religion*, where the grammar of the fourth phase still exists in isolation from that of a later phase and process of adaptation. There a functional definition of religion is about "trying to avoid the abstract one-sidedness of a single function-statement, which allows too much and renders not enough, to correct them and to complicate them through means of systems-theoretical analysis, in other words in order to incorporate in the theory of religion, that any social System, therefore society, too, has to solve more than one problem, hence, has to fulfill a multiplicity of functions" (Luhmann 1999, p. 84).

Another philosopher of dialectics, the French existentialist Jean Paul Sartre (2004) in his *Critique of Dialectical Reason* can be situated here, too, again he shows the prophetic structure, when he asks whether it is "some 'collective consciousness', a totality irreducible to its parts, [which] imposes itself externally on each and every consciousness, as the Kantian categories impose themselves on the multiplicity of sensations" (Sartre 2004, p. 391). A "collective consciousness arising from the synthetic unification" (ibid. p. 294) of a series of four, where the collective praxis leads to individuals realizing "in and through themselves the interpenetration of a multiplicity of unorganized individuals within them and that they produce every individual in them in the indistinction of a totality" (ibid. p. 253) on the basis of the two earlier forms: individuation or isolation and reciprocity. Just two years later, in the same way as Luhmann`s grammar changed, we can see Sartre`s reappropriation of the Unitive stage deep structure in his own lexis and autobiographical writing *The Words* where he for example writes about discovering his self as other: "[Thema Looming up out of an antediluvian world just when I was escaping from Nature and at last becoming myself,] [Antonymic rhema that Other whom I was aspiring to be in the eyes of others, I faced my Destiny and recognized it: it was only my freedom.] [Thema It had been set up before me by my own efforts] [Antonymic rhema as if it were a foreign power]" (Sartre p. 171).

Following Derrida (1981) in *Dissemination* where he, too, deals with the appearance of something still exterior to one`s interiority, one can say that in this fourth phase of the construct aware "discourses spring up regularly, engendered in the course of sequences that are themselves part of the quadrature [quadruplicity] of the text, belonging precisely to one of the

four faces, the one that seems to be open for the perception of the spectacle [or adaptation], for the "now" of consciousness faced with its object [or goal-orientation], for the present tense of discourse [or integration] – belonging, in a word, to the face as what one faces, a surface of envisaged presence [or self-thematization]. This face also contemplates itself as the originary, immediate, unconditioned opening of appearing but it explains itself as an apparent opening, a conditioned product, a surface effect" (Derrida 1981, p. 299) before some years later – as mentioned earlier – the paradoxical grammar in Derrida`s writing takes over this appearance he in *Dissemination* calls "illusion". It now becomes part of deconstruction a process which "involves an affirmation, this latter being linked to the coming – the venire – in event, advent and invention" (Derrida 2007, p. 23), it now becomes unconditioned and beyond being just a surface some "aspect of invention, of inventive power: as if it were necessary […] to reinvent the future" (ibid. p. 23). This move from recognizing a larger mind beyond the higher mind. While in the higher mind it is still the persons "separate mental self which it makes the judge, witness and center of the universe and through it alone strives to arrive at its own higher self and reality" (Aurobindo 2005, p. 181), in this transition "the veil is rent and the divided mind overpowered, silent and passive to a supramental action that mind itself gets back to the Truth of things" (ibid. p. 181).

Further Differentiation in the Unitive Realms

Now, we have shortly expressed the move from synthesis of mutuality and two sides of reality and how the early Unitive phase shows an antonymic structure in its absolute. However, towards the fourth phase of the first Unitive cycle and Luhmannian life-stage two things happen: a) first, the antonymic structure gets framed as paradox, a word that increases in number, importance and scope of meaning from the 1984 *Social Systems* towards the books about economy, politics, moral, religion, education and other subsystems of society where paradox is mentioned more than a hundred times within each book and b) the typical triadic structure which was present in all of the four earlier stages from Achiever, to Pluralist and Autonomous towards Construct-Aware moves into a quadruplicate form or a more symmetric style of writing that reminds of that which is present in concrete operational writings like in this passage from the Hymns of Homer: "[Rhema 1 part one And so long as she, the goddess, yet beheld earth and starry heaven and the strong-flowing sea where fishes shoal, and the rays of the sun,] [rhema 1 part two and still hoped to see her dear mother and the tribes of the eternal gods,] [rhema 2 part one so long hope calmed her great heart for all her trouble] [rhema 2 part two and the heights of the mountains and the depths of the sea rang with her immortal voice]" (Hymns II, 33-39).

This parallel structure can be apprehended in the 1986 *Ecological Communication*. Here the first cycle of observation is completed and Luhmann, in defense and in an attempt to sustain the system of ecological communication, writes "[rhema 1 part one overall it is obvious that with the scientific inquiry the respect regarding 'natural equilibria' has grown,] [rhema 1 part two be it within ecological interrelationships, be it within different countries and today even in developing countries,] [antonymic part of rhema 1 part one that however, at the same time the own society is exposed to the most enormous critique] [antonymic rhema 1 part two and exaggerated with calls for intervention, as if it were no longer a system]" (Luhmann 1990, p. 20). This sentence is both a) a more extreme formulation of the first phase variation of antonymic construction and b) including much of instrumental and locative modifications and contrasts of a fourth phase and contains this in the quadruplicity of this nominal and homonymic antonymic superstructure. This kind of structure – including four meaning carrying clauses not just reformulations or explications – is something one can, too, see in some of the Unitive sentence completions where this fourfold dissection can take on form as in I am "[rhema 1 someone and everyone,] [rhema part two special and ordinary,] [rhema 2 part one one tiny part of fast cosmic system] [rhema 2 anto-

nymic part two who has the potential to make a difference]" (Cook-Greuter 2010, p. 82) including two rhema in a, nominative to accusative phrase similar to what we have seen in Achiever sentence completions and which might show up here more in direction of a dative-like phase e.g. a good boss "[rhema 1 of goal orientation is someone who knows how to balance authority and freedom,] [rhema 1 part two who is able to embody and/or give voice to the deeper mission of the organization,] [rhema 2 part one of adaptation while seeing it in the context of society,] [rhema 2 part two and can do this in service of a deeper Reality]" (Miniard 2002, p. 75). It even can show up with one rhema like in a good boss "[rhema 1 part one can be a 'boss'] [rhema 1 part two if he needs to,] [rhema 1 part three or a coach, leader, shaman,] [rhema 1 part four antinomy or disappear]" (Miniard 2002, p. 74).

So, now, as we have looked at the seemingly new superstructure, lets come to the paradox: Luhmann in 1984 formulates one of the paradoxes, a paradox that says that a system can only comprehend its rationality from understanding its subsystems and which "we attribute to the pure form of self-referentiality, and we therefore see the rationality as re-entry of the difference into the different, as installation of an open system/environment-difference into the system that identifies itself through this difference" (Luhmann 2012, p. 641). The paradoxes here are concerned to move the system and its self-referentiality from anti-passive and being a receiver in an involuntary sense of a voluntary, integrated beneficiary towards agent-oriented-intransivity to create a "system which disposes over its environment, [as it then] basically disposes over itself" (ibid. p. 641).

This idea moves into observations of observations about the possibility of dissolving antinomy or the so-called paradoxes. Again, this is, similar to the first Unitive phase, a special and emergent kind of dealing with subject and object. It now generates and is characterized in *The Economy of Society* through the "possibility for observing observers. As the observational context varies from observation to observation, one can only comprehend such a system as polycontextural system; and our thesis is, that the system for this has to take on the form of an environment for participants, of an environment, which does not variate randomly, but is neither a simple function of purpose-oriented behavior" (Luhmann 2019b, p. 98). Luhmann manages this switch after an intermediate fourth phase. However, in this intermediate phase one first has in fact "to reverse into its opposite the general perception that first a 'subject' has to make an aware decision for communication and then it can act communicatively. First if out of reasons [from systems], which cannot be ascribed to a consciousness, ecological communication can get under way and start to co-determine societal communication, one can expect that the topics of this communications gradually become contents within consciousness" (Luhmann 1990, p. 65). This switch, where the "inside" or "goal-orientation" of systems determines their environment as conscious subjects and thus themselves, generates a surrounding or environment which is no longer co-subordinate but strictly subordinate, in the sense, that one can achieve new orders of complexity through shifting the boundary and redefining something not as system but an environment – the whole earlier problem ends in smoke as mental and thus communicative or discoursive boundaries become acts of a second order observer, observing its needs. This finally enables to resolve paradoxes through "imposing a difference of level or a hierarchy" (ibid. 2019b, p. 99). Therefore, for example the paradox of scarcity – "that each access to scarce resources, which serves the reduction of scarcity, increases scarcity. Increasing supply of one is larger hardship for others, and only because it is that way, the social problem of scarcity exists" (ibid. 2019b, p. 98) – can be resolved through different options, e.g. if society "establishes indifference to the misfortune of others, that is, to grant the full differentiation of the economic system" (ibid. p. 99) or through making the paradox invisible relocating it to "the invisible hand" (ibid. p. 99).

Differently said, Luhmann points out the interplay of two antinomies creating a certain state and looks how this paradox shifts from level to level through creating different observations and scripts within the environment – or as he in the third and dative state of this phase formulates "each paradox is only paradoxical for an observer who has already systematized his observations. […] And a path laid down on behalf of resolving can be described as the re-entry of the form into the form or of the distinguished into the distinct. As the form within the form is at the same time not the form, it is a paradox but likewise an unfolded paradox; as one now can choose distinctions, whose re-entry can be interpreted. An observer has the double-option to describe a system both from the inside and the outside, hence to choose both an internal and an external point of view. It is self-evident that he cannot do both simultaneously as he therefore has to use the inside/outside distinction" (Luhmann 2018a, p. 179f). Hence, we are here in a new period of system and environment differences, though anything that happens is within the oneness or unity of within the system creating distinctions and differences by and upon itself.

Luhmann in this phase does approximately match up with Ken Wilber`s (2000) *Sex, Ecology and Spirituality* however Luhmann`s four quadrants are as mentioned the temporal evolution, the factual differentiation and the social communication connected through the autopoiesis of society, the self-thematization and self-description of itself as "different entering gates for the depiction of the total painting" (Luhmann 2018b, p. 1138) of a theory of society. But while for Wilber the fifth dimension added with the new tier or the basic operation is: "No objects, no subjects, only this. No entering this state, no leaving it; it is absolutely and eternally and always already the case: the simple feeling of being, the basic and simple immediacy of any and all states, prior to the four quadrants, prior to the split between inside and outside, prior to seer and seen, prior to the rise of worlds, ever-present as pure Presence, the simple feeling of being: empty awareness as the opening or clearing in which all worlds arise, ceaselessly: I-I is the box the universe comes in" (Wilber 2000, p. 318), Luhmann introduces in his Unitive writing the difference of medium and form. Both, however are no real existents or reals, like the timeless witness, but artificial distinctions in which "the system operates in a way that it binds its own medium towards its form, without dissipating the medium by this, as much as light is cannot be wasted through seeing. […] Ultimately one here needs to observe that it is not the medial substratum, rather the form which is operatively compatible in the system. […] One does not see the light, but the objects, and when one sees light, then on the surface of objects. One does not hear the air but sounds; and the air itself has to make a sound if it wants to be heard" (Luhmann 2018a, p. 194ff). And the basic medium generating self-descriptions and observations is communication "which makes the unlikely nevertheless likely: the autopoiesis of the communicative system of society" (ibid. p. 197). However, for Luhmann many media exist, but these of society all are grounded on speech, language and communication – the opening or clearing in which all words arise – and which later artificially differentiate between this oneness where media can become form like "light that becomes allowed in cathedrals, becomes form, to play with the pillars and arches. The physical structure of the world has to enable this, but the differentiation between media and form is a personal contribution of the observing organism" (ibdi. p. 197).

This again reminds us of the *Formal Organization* where Luhmann reduces the social function of his systems-theory to the "generalization of behavioral expectations, which express themselves in the possibility of implying a consent regarding the formal expectations with all members regardless of their individual, different preferences" (Luhmann 1964, p. 68) – but now there are no longer shared opinions, one subordinates, but both inside and outside, and the four dimensions of society arise all through the surface of media.

From Second to Fourth Phases

Whereas in the movement of the third and fourth quarter the social dimension of second order observations increases, in the first quarter new and more paradoxes arise. The resolution of the paradox of scarcity disembogues therefore again in a more elaborate version of the 1984 paradox of self-reference and differentiation within this self-reference: "The system as unity and the system as difference, namely as difference of an each time participating system and its system-internal environment" (ibid. p. 101). Respectively, this differentiation between two levels of a system, as difference and unity, was not given in 1984, when Luhmann finished his *Social Systems*: there it is only the difference "which virtually holds together the different; it is different, and not indifferent. Thus far, as differentiation is brought onto a uniform principle, one can read the unity of a system from its differentiation. The system gains systematicity through differentiation, it gains additionally to its pure identity (in difference to others) a double-container of its unity (in difference to itself)" (Luhmann 2012, p. 38).

In the same sense as there does not exist a second order observer in 1984, the writing is more about the way this difference creates unities – not the possibility of shifting between two sides – of "both… and" like inside and outside, system and environment, process and structure, elements and relations, order and chaos and so forth reminding of verse 2 of the Dao de Ching where it is said that "if man know the beauty, they, too, understand what is ugly. If they learn what is good, they, too, realize what is evil. In this way being and not-being, heavy and light, long and short, high and deep, allow to know each other". However, we have to point to the slight difference, or as Luhmann in 1984 would say: "One has to notice the dialectics" – "One approaches dialectics, when one in light of the synchronization of self-reference and other-reference is interested in the underlying unity. Hence, ultimately turns towards the unity of unity and difference and not towards the difference of identity and difference" (Luhmann 2012, p. 607). As we have already shown: the Unitive stages have four operations in their repertoire instead of three as the earlier stages – as we will point out in *4.b Alternative Tier-Structure* – from Expert to Construct-Aware and hence the old notion of the Buddha, which says "between perception and action lies interpretation" has to be reformulated in a certain sense into: beyond the oneness of perception and action through interpretation lies awareness of interpretation, or the absolute idea and spirit. Figure 5 depicts this difference between the two tiers.
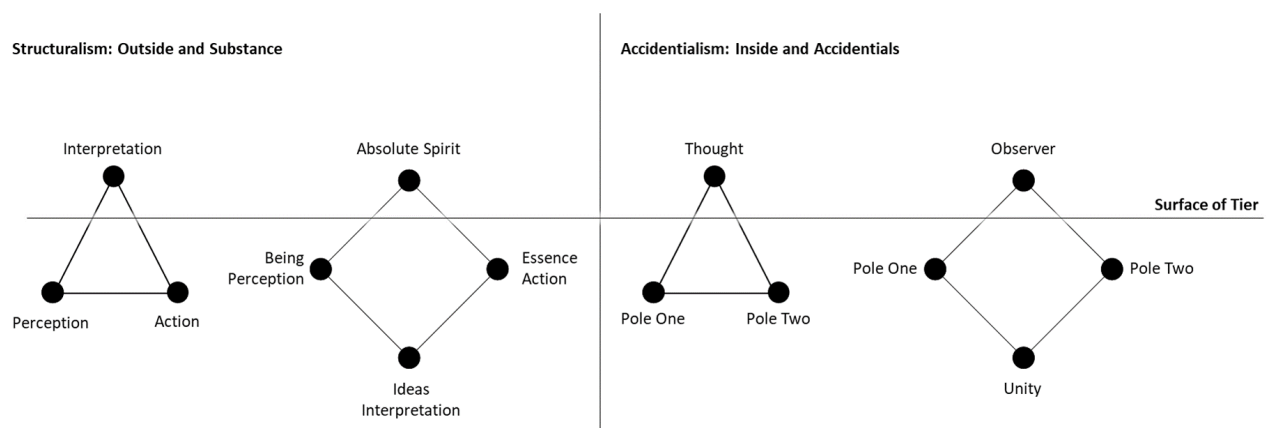

Figure 5. The difference of the "both… and" periods of adaptative stages in two tiers and their more structuralist, outside and their more genetic, inside expressions.

One can show this within Ervin Laszlo's (2002) *Systems View of the World*, where not paradoxes are unfolded but the quadruplicate structure always consists out of 1) awareness of 2)

something that could be classified as interpretation 3) something that could be classified as essence and finally 4) something that relates to being. For example, when he writes about the systems-view of oneself he differentiates three layer of sub-organic, organic and supra-organic which are "rather 'levels' rather than 'categories' of reality, distinguished in reference to modes of organization rather than to essence or substance" (Laszlo 2002, p. 27) which are reiterated and explored either in sentences or in paragraphs: "[Supra-organic the human being is a module] [Organic in the multilevel structure that arose on earth as a result of] [Sub-Organic part 1 as awareness of pole one nature`s penchant for building up in one place] [Sub-Organic part 2 as awareness of antonymic pole two what it takes down in another]" (Laszlo 2002, p. 60).

However, as one might think of Teilhard de Chardin and others, these three layers exist earlier, too, but what is different is there is no simultaneous view from within all three of these levels plus awareness but one broad view projected onto them – onto merely one at a time as syntheses of the sentence, as the interpretation between action and perception: for example when de Chardin writes that "really, love-that is to say, the affinity of being with being-is not peculiar to man. [Theme as Synthesis It is a general property of all life] [Rhema part 1 as Action and as such it embraces, in its varieties and degrees,] [Rhema part 2 as Perception/Adaptation as all the forms successively adopted by organized matter" (de Chardin, p. 264). Not only is there intense anthropocentrism in the notion that "by rights, to be certain of its presence in ourselves, we should assume its presence, at least in an inchoate form, in everything that is" (ibid. p. 264) but, too, lacks the "unfoldment of paradox" that is there in more structuralist writers, too, even if backgrounded and in a more classifying manner of sorting into categories of levels. Therefore, for Laszlo "the fact that physical entities such as atoms provide communication between their parts in terms of the interaction of field or force potentials, that things such as organisms provide parts communication by physicochemical means, and that multi-person organizations stablish communication of quite another kind, does not invalidate their wholistic character" (Laszlo 2002, p. 29). Here communication as partiality and wholeness are unfolded into one communication based on separation "constitutes an integrated unity of all these in mutual relation" (ibid. p. 28). And the many forms communication can take here are nothing "but in all it forms what remains communication" (ibid. p. 29), sorted into a fourth category or structure of awareness.

One can see this in Wilber`s (2000) *Sex, Ecology, Spirituality*, too, anything is "nothing but within a quadrant" and each quadrant is in itself a triplicity of levels, as we can see here for the Upper Left – the interior Quadrant of the Individual: "[Fourth as Awareness When it comes to the developed forms of depth in humans,] [Third as Interpretation I only have access to that depth via interpreting] [Second as Action what you tell me] [First as foundation for perception in a dialogue]" (Wilber 2000, p. 141). Understanding self and other becomes a fourfold process as Wilber shows in this illustration: "[Rhema 1 And thus, I have to reread the text of my own feelings], [Rhema 2 locate the source of my insincerity,] [Rhema 3 and reinterpret my own depth more faithfully,] [Rhema 4 as providing Awareness with the help, usually, of somebody who has seen the mistranslation before and can help interpret me to myself.] The issues are meaning, interpretation, and sincerity (or its lack)" (ibid. p. 142).

This shows up in Unitive sentence completions, too, e.g. in "I feel sorry… [Expressing awareness for many things, and grateful also,] [Interpretation Layer: Expressing interpretative Ambiguity as these same things have often pulled me beyond the "small self" need to apologize] [Being Layer: Expressing Perception towards recognition of] [Essence Layer: Expressing ground for Action much greater ground for learning and living]" (Cook-Greuter 2011, p. 17) versus the completions with two poles depicted earlier.

Especially, when Luhmann looks at the social system in this phase, he describes it as a receiver, as said, a beneficiary in receipt of its constituting elements, words, which turn into communication, and come from conscious systems or humans: "With the distinction of system and environment it is gained the possibility to understand the human as part of the societal environment at the same time as more complex and unbound, as it were possible if he had to be construed as part of society; because environment is, in comparison to the system, precisely that area of the distinction which displays higher complexity and less being-structured" (Luhmann 2012, p. 289). However, this also means – before moving into the fourth phase as described above – to turn the point of view and see humans as those who benefit from society and society as some sort of external possessor or dativus judicantis, judging the utility of humans for the viability of systems, and so, humans "can only develop their complexity in regard to the social system and are at the same time used by the social system […] to extract actions from them, which are supportive of the requirements of social combinatorics" (ibid. p. 293). However, as we have seen in the third period of Achiever and within the Autonomous writing, there is a great amount of "depending on" and "according to" thinking – the animate environment thus is possessed but only "with different selectivity and different compatibility and different backgrounds and futures" (ibid. p. 293).

Luhmann here in 1984 answered a question he asked in 1981: "How is social order possible on the basis of plural subjectivity of synthetizing performances" (Luhmann 1993, p. 253).

A question that has been slightly differently stated by one of the founding fathers of German sociology, namely Georg Simmel (2018), who beautifully answered it in a third phase unfolding of paradox between a transcendent and an immanent of a second order observer: "Societies are buildings out of beings which can stand on both sides inside and outside of it […] by which society creates maybe the most conscious, at least the most general expression of an archetypical form of life: that the individual soul can never stand within a relationship, on whose outside it stands at the same time, that it is never put into an order, whose outside it is, too. […] The religious man feels completely embraced by the divine being, as if it were just a pulsation of the life divine, its own substance is unreservedly, even in mystical undifferentiated-ness given into the absolute. However, to give this being-molten-into any meaning after all, it has somehow to sustain its separateness […]. The oneness is in its meaning dependent on the other-ness of god" (Simmel 2018, p. 53).

However, for Luhmann humans are not that important in answering the question of how society is possible in 1984. Speech is one constituting moment humans add and by which they are integrated with the social system, while the social system is reciprocating with them, but central are the ideas of observation and autopoiesis, or to apply "the terminology of observation and self-observation on the level of a general systems-theory, and […] combine it with the idea of autopoiesis, self-observation becomes a necessary component of autopoietic reproduction" (Luhmann 2012, p. 64).

This mode of observation and autopoiesis slowly starts to grow into place in the 1980s. In his book *Political Theory and the Welfare-State* Luhmann (2011, p. 51) says that "self-observation would have to include the observing systems and lead them to self-reflection". However, here this mode is rather "the continuation and augmentation of generalizing judgment" (ibid. p. 52), which is in Luhmann`s last book within this seeming stage recognized as an "observer that recognizes that its object is a self-referential system, and recognizes with this additionally that this object is constituted tautologically and paradoxically, and in so far randomly and without the possibility to operate, which means it cannot be observed. […] It

recognizes its own paradox: the arbitrariness and impossibility of an observation" (Luhmann 1990, p. 55).

However, earlier in the 1980s exactly this arbitrariness first allows to see system and environment as "relationship between interdependencies" (Luhmann 2011, p. 53) and then in the difference of system and environment which creates, through shifting of boundaries, "the evolutionary surplus of the achievement of 'meaning' on the basis of an no longer stoppable self-referentiality of systems-constitution: a meaning that lies within an unprecedented combination of closedness and openness towards the environment of systems-structure" (Luhmann 2012, p. 64).

Luhmann in 1984 basically talks about time, i.e. autopoiesis as self-constitution and self-reference in differentiation that sustains systems as long as they don't lose "their determinability, hence their compatibility for further operations" (ibid. p. 59) and meaning is created by an observer through creating differences "as a surplus of references towards other possibilities" (ibid. p. 95) and therefore he primarily depicts a temporal movement. Contrary meaning in 1975 is based on reflections on time – evolution – but not anything is contained within time. Rather meaning is, when he back then touches from the accusative into the third and dative phase, where "the simultaneous presence of each actuality and horizon imparts meaning to the given, more functionally expressed: concrete access to and localization within other possibilities. Whatever 'underlies' meaning: meaning covers anything that is pregiven to it, with appresented references, which radically transform the actuality and leaves nothing meaningless. The permanent fabrication of this 'co-presence' within the daily lives, […] enables and enforces likewise foremost effective procedures of selection – namely those, which co-present and keep present for further operations the 'wherefrom' or 'from whom' of selectivity" (Luhmann 2017a, p. 633). Differently put it is dependent on a place wherein and not only pre-given, but additionally not aware of being a process coordinated by an observer, but rather based on the experience of reality and the experience of boundaries which allow "to thematize across borders the environment after the system or vice versa: the system after the environment" (ibid. p. 638). Here in 1975 Luhmann again reminds strongly of Whitehead, who writes in an almost perfectly matching grammatical phase, that "the subjective form originates, and carries into the feeling [, into presence,] its own history transformed into the way in which the feeling feels. The way in which the feeling feels expresses how the feeling came into being. It expresses the purpose which urged it forward, and the obstacles which it encountered, and the indeterminations which were dissolved by the originative decisions of the subject" (Whitehead 1978, p. 232).

What we have already pointed to, using *Process and Reality*, is the synthesis of opposites "in the final unity of one actual entity [which] is another fact of 'givenness.' The actual entity terminates its becoming in one complex feeling involving a completely determinate bond with every item in the universe, the bond being either a positive or a negative prehension" (Whitehead 1978, p. 44). And in the same way Luhmann can in this Construct-Aware stage – as he further grows into the third phase – comprehend, as two sides of a coin, that "contrary to appearance, binary schematizations don`t serve the division rather the conjunction of opposites. They ease-up the transition of one definition of a situation towards its opposite, by demanding nothing more than a negation, whose admission is regulated in the system – a technique of paradoxical integration" (Luhmann 2013, p. 41). This is a first glimmer or the substratum and contained object of what dawns to him in his book about *Social Systems*, namely as differences created by an observer – differences that are both something that makes a difference and autopoietic structures and processes of system and environment, which co-evolve in mutuality, producing differences in a way they become or are perceived as a unity.

Contrary to this recognition of the "both… and…" structure within the third phase of Construct-Aware or the self-thematizing stage, the second phase deals much with modes of thinking as did the second phase of the integrative period in Luhmann`s writing in the mid-1960s. However, while the pluralist mode was directed towards e.g. "information processing through communicative action as it is the precondition of all higher forms, to apprehend and react adequately to all complex environmental interdependencies" (Luhmann 1966b, p. 69), and thus there was only one point of view, that of a third which nevertheless apprehended other in a way that could lead to a functional fit, the self-thematizing Luhmann looks at both sides simultaneously – at system and environment – and how they could as one whole, or one communicative intersubjectivity stabilize certain self-narrations and thus self-maintenances. One can see this for example in the 1972 *Political Planning* where Luhmann writes that "meaningful behavior in systems of communication of public opinion requires the reduction of high complexity, requires especially an overcoming of the barrier of experiencing-and-being-able-to-act-differently-too of others and thus becomes demanding and difficult, as therefore the recruitment into the system itself – and that always means, too: more or less imperceptible socialization within the system – has to be requested" (Luhmann 2007, p. 26). One can see these thoughts, too, in Pierre Bourdieu's (2016) *Distinction*, if slightly differently oriented, but "the contentions for the acquisition of cultural goods at the same time represent symbolical contentions for theses distinctive features […] [wherein] the value of culture constitutes itself or, which is in the end the self, as the belief of the value of a culture, the interest in and what is interesting about culture" (Bourdieu 2016, p. 388f). As Luhmann puts it "the full differentiation of sub-systems should not mean that the causal or communicative interplay of these sub-systems with their respective societal environment are cancelled or are comparatively minimized […] [but] based on the recognition and minding of the rules on whose basis communication creates selective accomplishments and helps to allocate, as part of a system, through the kind and the direction of a selection" (Luhmann 2007, p. 27). And these selective mechanisms are reflected by Bourdieu (2016, p. 389) – the "basis of this dynamic of the field, wherein the cultural goods are produced, reproduced and create profit of distinctions through their circulation, which are the strategies that especially through their reciprocal competitiveness lead to these objective outcomes, contribute to the scarcity and the belief into the value of these goods" and regulate the affiliation to a social class, which is a system.

Completely contrary to regulating the integration into system Wilber (1996) writes in *the Atman Project* using a similar grammatical overlay of the Construct-Aware stage how transcendence works through dissolution of boundaries, because „the subject can find the prior Whole only by letting go of the boundary between subject and object—that is, by dying to the exclusive subject. And the subject, obviously, is terrified of this. And because he can't or won't let go of and die to his separate self, he cannot find true and real transcendence, he cannot find that larger fulfillment as the Whole. Holding on to himself, his subjectivity, he shuts out Atman; grasping only his own ego, he denies the rest of the All" (Wilber 1996, p. 119) – it is basically the condemnation of the earlier depicted Construct-Aware view the more Aristotelian thinker generate, where there still exists a "real" or "projected" inside and outside, which are in relationship and where boundaries are regulated before at the next stage one embraces a "both… and… and the relationship of both sides to each other". So, where for Luhmann the line stays important up into the Unitive realm within his *Theory of Social Systems* for the neoplatonic Wilber "to erect a self-boundary or barrier and hold a separate-identity feeling against the prior Wholeness, not only involves illusion, it requires a constant expenditure of energy, a perpetual contracting or restricting activity" (ibid. p. 119) at the Construct-Aware level.

This view matures from his *No Boundary* in the more nominative phase, where the drawing of a line can be shifted in radical ways and where "the most radical re-mapping or shifting of the boundary line occurs in experiences of the supreme identity, for here the person expands her self-identity boundary to include the entire universe. We might even say that she loses the boundary line altogether, for when she is identified with the 'one harmonious whole' there is no longer any outside or inside, and so nowhere to draw the line" (Wilber 2001, p. 5).

While Wilber here says "what you are actually doing, whether you know it or not, is drawing a mental line or boundary across the whole field of your experience, and everything on the inside of that boundary you are feeling or calling your 'self'" (ibid. p. 4), and negates the very act of creating boundaries as contrary to the ultimate he, in a 1984 essay on the *Spectrum of Psychotherapy* writes in respect to human maturation: "Healthy or normal negation serves several important functions. Horizontally, it helps differentiate self and object representations; vertically, it helps the disidentification, differentiation, separation, or transcendence of a lower level in favor of a higher" (Wilber 1984, p. 86). One can see this tendency of outside views to be concerned about this negation in Hegel (1977, p. 12f), too, where he writes that "it is the coming-to-be of itself, the circle that presupposes its end as its goal and has its end for its beginning, and which is actual only through this accomplishment and its end".

For Wilber (1996, p. 194) in *the Atman Project* unity is the sole purpose of man and "in place of unity consciousness, the individual, on the one side, takes as substitute self an inward-subjective world, and, on the other, he creates 'a world-out-there' as substitute object, and he places this substitute self squarely in the middle of this substitute world". In Wilber`s writing man creates "symbolic substitutes for lost Unity" (ibid. p. 194) when creating boundaries, and thus compensates the lack within not having achieved the ultimate neo-platonic purpose: reaching the absolute good. However, this is a process depicted as one of creating boundaries where one "must accept the 'death,' negation, or release of the lower level" (Wilber 1984, p. 84f). One must "dis-identify with or detach from an exclusive involvement […] to ascend to the greater unity" (ibid. p. 85).

For Luhmann however, one moves forward with boundaries all the way – they are vital and inevitable since they can create meaning: they force through "time, to think the relation of the exterior world and the interior world asymmetrically as an incline of complexity. And only this way [, by assuming a more complex exterior than interior and corresponding unities impregnated with a difference between actual and possible,] one can acquire a taste of meaningful complexity from the world, the operation wherein the operations by which systems of meaning [, like humans,] operate can find their place" (Luhmann 2012, p. 113). At least, so Luhmann (2012, p. 113) contemptuous, if one is not willing "to immediately re-specify within the ontological-metaphysical tradition purpose onto one preferred and meaningful" – like the idea of the good – as Wilber does.

In *Grace and Grit* Wilber (1991, p. 21) still holds on this truth of an ultimate, though now in the Unitive realm, when he writes that his former wife and love "and I believed in God as one`s own deepest Ground and Goal […]. And by 'God' I do not mean an anthropomorphic father figure (or mother figure), but rather a pure awareness, or consciousness as such, that is what there is and all there is, a consciousness that one cultivates in meditation and actualizes in life". Wilber here uses a "but rather" as demarking a negation that the is unfolded over three tiers. Sri Aurobindo (2003) in one of his earlier works, the comments on the *Isha Upanishad* applies the same pattern when he defines the ultimate in saying that "that which dwells in the body of things is God, Self and Spirit; the Spirit is not the subject of its material, but the master; the soul in the body or in Nature is not the prisoner of its dwelling-place, but has

molded the body and its dharmas, fixed Nature and its processes and can remold, manipulate and arrange them according to its power and pleasure" (Aurobindo 2003, p. 431). The recognition of no-boundary and negation here became the definition through negation or categorizing – a unity of being and nothingness. Contrary to handling that negation-categorization Luhmann in the grammatically matching period of his life writes, that for "the accomplishment in theories, that are possible in a semantic space [that can create something like personalization], are founded on a combination of strategies for totalization with strategies of decomposition and evaluation. The play of concepts generates with these boundary conditions its own limitations and non-arbitrariness" (Luhmann 1993, pp. 251f), and thus what a person can be as a comprehensive system and totality, if it wants to be a "wholeness and a sum of detail which can still be grasped by theory" (ibid. p. 251) – he thus reflects from the inside that each wholeness is a mere choice of moving the boundaries of perception while it seemingly can be experienced as an ultimate truth from the outside; there is a somewhat significant stage lag in what is reflected on depending on the identification with inside-Aristotelianism or outside-Platonism.

In Luhmann`s last creative decade, the 1990s, his autological period of observing the mechanisms of observing observers or second order observations, he no longer looks at these reflections on top of the integrative stage and thus the maintenance of systems through integrative self-thematization, but it is the problem of different second order observations that engages his writing. So, he writes in one of his essays in *The Morals of Society* about two modes of second-order observing and the way they are visible "in the cultural invention of normativity can be described as reduplication of reality – similar as one can distinguish between play and seriousness or after the evolution of language between language signs and what they signify" (Luhmann 2015, p. 233). And the foundation for resolving problems of second order conflicts can change in history and can create new problems and paradoxes – as depicted above for the paradox of scarcity. So, in distinction "of a society that assumes a religious foundation of world, we, the now-a-days, can no longer […] summarize these duplications in a transcendental principle" (ibid. 232). The problem for Luhmann back then is that "observation uses its own distinctions as blind-spot. It can only see what it can see with this distinction. […] Any observing, even the observing of observations, proceeds naïvely on this operational basis; or again in other words: that it proceeds uncritically in relation to its own reference" (Luhmann 1992, p. 85).

As we have already seen above, this turns more and more into a "both… and" of self-reference and other-reference, of seeing oneself from differences and unities that create an inside or an outside and different directionality, both within systems and their conscious environment of humans, of observation that can "incorporate self-transcending moments" (Luhmann 2018b, p. 1141) – an immanence recognizing its transcendence within the other or as Georg Simmel might put it: the recognition of the existence of the totality of others in our own being where "both [self-reference and reference through others] are only methodologically assuming a separate existence […] [but] are in an inevitable cycle […] [as] life can only be understood through life, and for this stratifies itself into layers [and others], each mediating the understanding of the other; layers which in their co-dependency proclaim unity" (Simmel 2017, pp. 177f). But for Luhmann the medium becomes metaphorically spoken "the holy spirit of the system" (Luhmann 2002b, p. 286) and the re-entry becomes supplemented and substituted through a mirror metaphor "a self-generated mock […], in whom the communication mirrors itself" (ibid. p. 286). A direction we can, too, see in Sri Aurobindo`s Essays in the Arya Journal however from the opposite side – the solution is not part of a re-entry of the form into form, of difference into difference but a) first "the redemption comes by the recovery of the universal in the individual and of the spiritual term in the physical consciousness.

[…] For then only can the purpose of its descent into material consciousness be accomplished, when the knowledge of good and evil, joy and suffering, life and death has been accomplished through the recovery by the human soul of a higher knowledge which reconciles and identifies these opposites in the universal and transforms their division into the image of the divine Unity" (Aurobindo 1915, p. 385f), in *The Ego and the Dualities* from 1915, – operations which are done by Luhmann`s autological processes of second order observation – and b) second the medium that mirrors back the system into the system as "Sachchidananda […] by laying hold on this secret delight which is at once the secret total delight of its own being and the original all-encompassing, all-informing and all-upholding delight of the transcendent and immanent" (Aurobindo 2016, p. 643), when he writes about *the Double Soul in Man* one year later. Too, Luhmann in his latest writings that span several phases, as he wrote, rewrote and expanded on them during a seven-year periods, using religious terminology made clear that the unfolding of paradox and the mirrorlike nature of media "make the difference of the transcendent and the immanent thinkable and speakable" (Luhmann 2002a, p. 77) and can reach so far that "with or without god, the possibility for a communication of the unity of transcendence and immanence, a communication that therefore confirms that it can find itself in anything that happens, becomes imaginable" (ibid. p. 111).

Final Contemplations

Projections into Luhmann`s Future

In his essay on *Knowledge and Construction* Luhmann in 1988 points out a hierarchy of instrumentals that lead to different orders of self-reference: "the differentiation of systems-reference of the first order observer from the systems-reference of the second-order observer that have to be made by a third order observer" (Luhmann 1988, p. 23). However, in 1997 Luhmann mentions that third order observations "basically are not distinct from a position of second order observing. It is not only a matter of a chain-phenomenon, not only a matter of A observing how B observers C, […] rather a reflection on the conditions of the possibility of a second order observation and its consequences for what than can still be common world or descriptions enabling society" (Luhmann 2018b, p. 1117). Second order observations become autological in Luhmann`s words: the second order observer has to take another observer and has "to locate himself on the inside or outside of a form he observers" (ibid. p. 1118) and by this can in describing his own mechanisms of description create an observation that is located within society, as contingent and not as something existent, as it where for a first order observer thematizing its own life-world. Luhmann describes a re-entry of evolution in itself, of the first distinctions as variation, selection and selective retention into themselves – an evolution that involutes.

Luhmann therefore spoke in the tradition of accidentalism – the inside view – about "the first distinction, […] [which] in the traditional context is relinquished to religion and its theology" (Luhmann 2002b, p. 325). This, when we look at Arthur Lovejoy`s roots of T*he Great Chain of Being* in the Greek culture is, contrary to "the Idea of the Good [that] was the God of Plato, this Unmoved Perfection [that] is for Aristotle the cause of all motion" (Lovejoy, pp. 42 & 55). The struggle for identity expressed in Luhmann`s latest writings as both a) a history of unfolded paradoxes which "not incidentally" (Luhmann 2002b, p. 323) supersede and subordinate each other but in a logical form connected to the evolution of society, which try and fail to succeed in their "communication of the unity of the system within the system" (ibid. p. 319) and b) the "very special distinction, that of […] system and societal system, and about the special problem of an inclusion of […] systems within that which is for them on the one

hand located within the inside and on the other hand happens on the outside, namely communication. A difficulty which is not grounded within epistemology or logical impossibility, rather therein, that one has to distinguish and keep in sight two system-references, namely system and society" (Luhmann 2000, p384).

This is a slight reverberation of Ken Wilber`s conflict between two sides of reality in *Sex, Spirituality, Ecology*; namely that of ascenders and descenders which Wilber (2000), too, resolves himself by unfolding a paradox, but on the more Platonic side, making evolution subordinate of involution and so he states that "there we stand now, at rationality, poised on the edge of trans-rational perception, a *scientia visionis* that is bringing here and there, but ever and ever more clearly, to all sorts of people in all sorts of places, powerful glimmers of a true Descent of the all-pervading World Soul" (Wilber 2000, p. 551). He looked at it from the other side: the re-entry and unfolded paradox of involution entering itself as evolution, of holons entering their own pregiven holonic structure.

Why is that similarity of importance for our endeavor? Because it allows us to project Luhmann`s future. In the last sentences Luhmann wrote before his death in 1998 – in *the Religion of Society* and *Organization and Decision*, one might see again a return to a nominal structure. But basically the conflict of systems as necessarily two sides of a distinction leads to the question whether "as system needs a 'self', and whether it is already sufficient to shift from one difference to the next […] [and] shift from one language into the next, to try out, what would be observed then" (Luhmann 2000, p. 442f) and the recognition of the pointlessness of being on one side as it creates both "what it confirms, however, too, what creates the difficulties […] [and] that the reflexiveness of self-description sabotages exactly that distinction, which is presumed (Luhmann 2002a, p. 354f).

When Wilber in his Integral Spirituality introduces the eight zones, he resolves his conflict of ascend and descend with an idea that he in a nominal grammar calls "simple enough. Start with any phenomenon in any of the quadrants—for example, the experience of an 'I' in the UL quadrant. That "I" can be looked at from the inside or the outside. I can experience my own 'I' *from the inside*, in this moment, as the felt experience of being a subject of my present experience, a first person having a first-person experience. If I do so, the results include such things as introspection, meditation, phenomenology, contemplation, and so on. But I can also approach this 'I' from the outside, in a stance of an objective or 'scientific' observer. I can do so in my own awareness, and I can also attempt to do this with other 'I's' as well, attempting to be scientific in my study of how people experience their 'I'" (Wilber 2006, p. 35f) It is a simple "both… and" perspective "since including both of them results in a much more balanced and inclusive approach" (ibid. p. 18).

So, Wilber, managed to combine ascenders and descenders into one point of view, in one map of reality as one territory, while he earlier struggled and subordinated the Aristotelian view to his version of a Neo-Platonism, "the coming of the Over-Soul that is the World Soul, touching each and all with its Goodness and its Glory, baptizing each with its Brilliance and its Blessing" (Wilber 2000, p. 521). By the way, it is the same subordinationistic solution that Aurobindo used 75 years earlier in his essay on the *Graduations of the Supermind*. Namely, that "the greater spirit above the mind appears at first as a presence, a light, a power, a source, an infinite, but all that is knowable to us in it is at first an infinite identity of being, consciousness, power of consciousness, Ananda. The rest comes from it, but takes no determinate shape of thought, will or feeling above us, but only in the intuitive mind and on its level. […] [The descend] of a greater action of knowledge and will and spiritual feeling [that] manifests

and seems to organize itself above the mind and this we recognize as the true supermind and the real native play of the infinite knowledge, will and Ananda" (Aurobindo 1920, p. 2).

So, if Luhmann had manifested this next step he would have probably managed to see both: inside and outside, self-reference and other-reference, consciousness and observing, self-thematizing systems as the differences of a new, integrative third, where, using Aurobindo´s description of the overmined – the stage which did not exist in Aurobindo's accusative stage, but was added later as intermediate step to the supermind –, "in place of an uncentred and unplaced diffusion there may be the sense of the universe in oneself or as oneself: but there too this self is not the ego; it is an extension of a free and pure essential self-consciousness or it is an identification with the All, – the extension or the identification constituting a cosmic being, a universal individual. In one state of the cosmic consciousness there is an individual included in the cosmos but identifying himself with all in it, with the things and beings, with the thought and sense, the joy and grief of others; in another state there is an inclusion of beings in oneself and a reality of their life as part of one's own being" (Aurobindo 2005, p. 986).

Alternative Tier-Structure
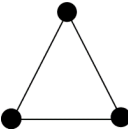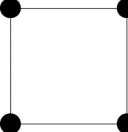
According to Ludwig von Bertalanffy (1964, p. 48) in his *General System Theory* says, that "a unitary conception of the world may be based, not upon the possibly futile and certainly farfetched hope finally to reduce all levels of reality to the level of physics, but rather on the isomorphy of laws in different fields". In the same sense, we cannot reduce the tiers or orders consisting "of a particular mode or quality of action or thought" (Mascalo & Fischer 2010, p. 156) to one cycle of fours but as shown in table 6, the "both… and" structure both has isomorphic aspects and difference or emergent properties: it is a different unity of differences.

As we have already pointed out: As Luhmann relates second order observations towards Hegel`s absolute spirit, it, as the spirit, is based upon a structure built out of three tiers: namely Being, Essence and Ideas (Hegel 2011). A tier-structure that is common in more structuralist thinkers in the Unitive realm. We have pointed to Charles Sanders Peirce`s (1998) firstness, secondness and thirdness that is followed by a fourth order implicit in his writing and which we earlier mistake for something else: "man is capable of a spiritual consciousness, which constitutes him one of the eternal verities, which is embodied in the universe as a whole", so Peirce (1998, p. 3).

Peirce, too, offers another concept that can foster understanding of emergent properties. As he points out, it is of ultimate concern for understanding his categories to see "the distinction between the Genuine and the Degenerate" (Peirce 1998, p. 172): each of his three categories can appear in full form and in degenerate e.g. the representation of agent and patient as separate and in interaction "is, indeed, germane to Thirdness, while it is alien to Secondness. That is to say, agent and patient as they are by themselves in their duality are not distinguished as agent and patient" (ibid. p. 171) within secondness but just within a third, an interpreter, who can, too, as pointed out again see the unity of these opposites, understand agent through the patient. In the same sense, we have pointed out, that integration in the Achiever writing of Luhmann appears as adaptation and the social dimension as simple form of obedience regardless of one's individuality: it is degenerate and only shows up completely with the third stage in this tier. For Luhmann, too, observations and second order observations, though evolutionary emergent are, ever-present, too: each time and place unfolded paradoxes, though unaware of doing so.

This is true, for the construct-aware stage, too: as it can carry four operations – adaption, goal-orientation, integration and self-thematization – but as it seems has are only three meaning carrying parts in its sentence completion: thesis, antithesis and synthesis; or first, second and third; or evolution, differentiation between system and environment as well as communication. Three minus four means that one operation has to be still in the background, it is there as degenerate and can only show up in a fourth meaning carrying part of a sentence- thus within the next Tier or as Aurobindo puts it: "Supermind is the fourth Name – fourth to that in its descent, fourth to us in our ascension. But Mind, Life and Matter, the lower trilogy, are also indispensable to all cosmic being, not necessarily in the form or with the action and conditions which we know upon earth or in this material universe, but in some kind of action, however luminous, however puissant, however subtle. For Mind is essentially that faculty of Supermind which measures and limits, which fixes a particular center and views from that the cosmic movement and its interactions" (Aurobindo 2005, p. 282). A fourth order that would be the genuine form of self-thematization of an identity maintaining itself by integrating all that is, differentiation within all that is and adapting to all that is, however localized and restricted it might be through its preconditions of being human or a certain type of system. Table 8 depicts the trajectory of tiers.

Table 9. Stage and tier-trajectory with symbolism.

The Tiers	**Firstness:** Being, Body, Evolution, Adaptation, Temporal	**Secondness:** Essence, Life, System/Environment, Goal-Orientation, Factual	**Thirdness:** Ideas, Mind, Communication, Integration, Social	**Fourthness:** Absolute, Spirit, Self-Thematization, Pattern Maintenance, Observational
Symbolism				

If we take a closer look at the concrete stages, we can recognize that the symmetry here is actually not based on four operations but rather the outcome of two – the secondness of agent and patient: one can not only recognize this within the Homeric texts, but, in particular within the old testaments poetic structure of parallelisms (Zenger et al. 2012). In this special type of writing two sentences are added together either in synthetical, synonymous, antonymic or comparative form. One can see this in e.g. psalm 18:14 where there is written "and he sent out his arrows and scattered them; he flashed forth lightnings and routed them" or in psalm 18:4 "The cords of death encompassed me; the torrents of destruction assailed me" as well as in other passages where one can clearly see, who the agent or god it one with his patient the world as in psalm 19:1: "The heavens proclaim the glory of God; The skies display his craftsmanship".

However, this structure is not only common in poetics but, too, in Interviews on moral Dilemmas done by Anne Colby and Lawrence Kohlberg (2010). There one can see the progress through the moral stages through the form this parallelism takes: e.g. on the question why a child is to obey to one`s father, it first looks like a) "[rhema 1 because it`s his father,] [rhema 2 subordinate always he is older]" (Colby 2010 et al., p. 244) and moves to the more complex concrete notions where the agent and patient are integrated like b) "because that`s his son [rheme 1 part one and if he] [rhema 1 part two doesn`t give him,] [rhema 2 part one he would get punished.] […] [He has to do rhema 3 part one] [rhema 3 part two what his father says,] [rhema 4 or he will get a licking]" (ibid. p. 245) and culminates in c) [rhema 1 part one He should listen to his father] [rhema 1 part two because] if he listens to his father,] [rhema 2 part one his father might be good to him] [rhema 2 part two and give him things he wants]" (ibid. p. 247). Or as Patrice Marie Miller and Suzanne Lee (2007) show,

while the cognitive functioning of the 2.0, i.e. Rule-Oriented, individual tends to state "simple, single-action statements about what had happened. These statements can be chained together […] [and] generally [are] focused on subjects themselves or on the other person, but did not suggest coordination between the two, […] [while] [conformist or 2.5] statements were also story-telling statements; however, they either showed the basic coordination between two people, or between two attachment entities" (Miller & Lee 2007, pp. 10f). There, discourse, as on moral stage 6 becomes a lived reality, where within the degenerate third, the still invisible, the communication with its interpretation, two sides are on within the "both… and… and the relationship of both sides to each other". So, here we can see three stages. But this is true for an earlier stage, too, which creates sentences as complex as "[Theme an apple] [Rhema on the table]" (Ranti 2015, p. 105) correlating with the Impulsive stage as depicted in Hy and Loevinger`s (2014) *Measuring Ego-Development.* The stage where cognitive development allows people to "verbalize about what they like and want" (Miller & Lee 2007, p. 8).

But there is not only evidence from developmental measurement but as the Jewish philosopher and biblical scholar Friedrich Weinreb (2011) writes in *Number, Sign, Form* the concrete passages of the Tora, i.e. the Old Testament, are full of series of three with a final fourth. So, the creation story of the genesis can be structured as a series "where development from the first over the second to the third day fulfills itself" (Weinreb 2011, p. 50). The fourth, fifth and sixth day give rise to the accidentals of the substances created on the first three days and are their own series. All culminates in the seventh day where both happens "God ended his work which he had made; and he rested on the seventh day from all his work which he had made" (Gen 2,2) – a concrete Form of latent pattern maintenance one might say with two opposite unified as "ending", which sometimes is translated as "finishing", and "resting". More intriguing however is, that the third day and the third in many stories of the old testament is the position where a "both… and…" comes into play that "binds the earlier into a cycle" (Weinreb 2011, p. 51), so is the third and last of the patriarchs both "Jacob and Israel" (ibid. p. 51).

But Hegel`s being, which he himself related to childhood development, and Peirce`s firstness deal with an even earlier order, where according to Jean Piaget (1956) in *The Origins of Intelligence in Children* a child starts to raise external relations "to the rank of symbols by relation to themselves. The image so constituted therefore becomes the signifier of which the signified is none other than the sensorimotor schema itself", which in Peirce`s (1998, p. 161) words might be a "Feeling, or Firstness, to represent itself to itself as Representation" without any second or third. At this stage children basically perform one rhema – phonemes, morphemes, echolalia, doubling of syllables maybe single word statements which include any higher operation of other categories. As Luhmann says the place where "the yes/no bifurcation opens […] to accept or reject an offered meaning […] and thus brings forth variation consequently within a communication directed to refuse communicative contents – it generates one deviant [or aligned] element nothing more" (Luhmann 2018b S.1140 & 2018a, S.460f) and that is the easiest form of evolution which later gets underpinned by selection and selective retention through memory. The speculative tier-structure than looks like it is depicted in Table 9. One can see there the successive substitution of operations from the earlier Tier until with the third stage of the tier all three operations are sourced from thirdness.

Table 10. Tier-Structure and an exemplarily symbolized movement through the Structure of the third Layer.

Aurobindo, Hegel, Peirce & Luhmann	Symbolical Representation	Firstness: Adaptation	Secondness: Goal-Orientation	Thirdness: Integration	Fourthness: Self-Thematization
Spirit / Absolute / The Mistaken (Fourthness) / Observational: Self-Thematization	(square diagram)				
Mind / Idea / Thirdness / Social: Communication	(triangle diagram)	Abstract Adaptation & Two Secondnesses	+ Goal-Orientation & One Secondness	+ Integration	+ Degenerate Fourth
Life / Essence / Secondness / Factual: System/Environment	(line diagram)				
Body / Being / Firstness / Temporal: Evolution	(point)				

Whether or not there is a fifth order is an open question in this paper. A possible fifth might exist as additional tier or, as Ken Wilber (2018, p. 401) points out in his latest book within a seeming fourth phase adversary and instrumental grammar using three rhema: "[Rhema 1 part one whereas the infinity and eternity of this wholeness is always already given] [Rhema 1 part two and can never be attained,] [Rhema 2 and the ultimate reality of the entire show is fully present here and now,] [Rhema 3 the relative reality […] has to grow and develop and evolve through time, intentionality, effort, and work]". Differently said, we have to increase the complexity of our observations and distinctions – the media is there, ever-present, everlasting but, too, as a question for the right modes of arbitrating complexity for operability and increasing the complexity of our world through operability and the resulting behavior.

Within this the challenges stay the same though we might find ourselves at one moment of this quest – that for unifying self-reference and the references of others or the consciousness within systems, their operations of observing completely exterior to us, with our consciousness – at a place where we start to life and engage a live that is the discourse of the all with the all. The interplay of any consciousness out there, with any observation, distinction, unity and unfolded paradox within us: but only as a fragment, as a miracle broken out of the mosaic, a oneness that only exists in its dissemination throughout humanity, sentience and the material universe however, so visible and visceral as it is, never apprehended in its completeness. It is merely a feedback from the whole into a part, a short departure and a wrong track of a mind that is meant to be collective, and thus turns into holding the lantern of friar and fabricating the illusions of Maya that are experienced as the hope for a pragmatic consensus and certainty within this endlessly changing and contingent that is held together by nothing more than nothingness as its boundaries – the patterns that can never be seen but through illusions;

a weaving together of communications within that self which is always already and has ever so perfectly been itself, as the incoming of complete other and the dialogue with him, as the dismemberment of the web of life but experienced as its oneness, as its nexus and sole importance as discoursive identity and self-thematization.

Our individual media and grammar and form and lexis both as our identity are thus again and again taken for the impregnation of an alien media and form, degraded to a permanent possession of that which was completed in the same way, as a mosaic tessellated from fragments, a picture that lacks any totality but is complete in itself, as this one moment that is completely monopolized by this discourse with the other, the stranger and alien and is as its own self-alienation in these moments perfectly free and perfected freedom: an eternal quest for versions of inside and outside, accidentalism`s logic and substance thinking or to decide whether to be an Aristotelian mirror or a Platonic sun – a choice that is always to choose our mistakes, too, the next moment of separation as oneness and freedom as abuse within this everlasting distinctiveness and uniqueness of our modes of perception – mistaking means for ends and ends for means, the ominous godhead for a purpose and the dubious first distinction for god while networks and grammars sustain empty patterns and empty patterns are sacrificed for the sake of that one infinity, the discourse that is society, the all and all of communications manifesting what would otherwise be invisible: phases, layers and tiers, that suddenly can have no more boundaries, no longer exist and give place to a new reappropriation of totality completely impregnated by this moment of discourse contrary to the last. While we are thus weaving together what is meant to be separate forever, meant to be dilemmatic and ever-progressive, we are destroying any possibility for union, unless we completely and everlastingly erase our traces, end all distinctions, all differences, all identities within that which is always before and beyond, and thus wake up from that boundless dream that creates nothing but adaptations, systems and environments, integrations and its self-thematization. When we break through into the sleep of all divisions, separations and existences, the error to match the totality and its substance with our contingent observations we engage in the then unseen rupture and disintegration of a tiny fragment of the whole tapestry, eventually rippling out into the farthest reaches of the cosmos and making the end.

Measuring Repeating Patterns: The Concrete, Subtle and Meta-Aware

O'Fallon's and colleagues (2020) research shows that, in terms of the assessment procedure, her model correlates with Cook-Greuter's model up through the Autonomous, i.e. 4.5 stage; but beyond there both the paucity of data and divergence in stage definitions makes it hard to try to compare them. And hence, there is basically no branch to hold on for figuring out a correlation of the later stages of Terri O`Fallons Model with the two subsections of the Unitive stage we distinguished in the section called *Construct-Aware and Unitive* we only can create some vague assumptions a) based on the descriptions of her stages and b) based on a "look through the hierarchical methods […] [where] we see the horizontal universal essences of everything" (O`Fallon 2019, p. 3) and her seeming developmental stage and on reduction of "looking through the horizontal methods [where] we see a multiplicity of unique expressions that defy replication, yet continually grow and change through time" (ibid. p. 3) into her type within the substance/accidence scheme. By this and the knowledge we unfolded within this paper we are going to pin down four logical fallacies that show up regularly in developmental research and we hypothesize here that they might have been committed by Terri O`Fallon and thus influence the accuracy of her model compared to a hypothetical reflection of the underlying universal substance within which any model of reality is grounded through using its basic operations and distinctions. These hypothetical fallacies are: a) a mixing-types-with-stages-fallacy, b) a decreasing-span-with-increasing-closeness-fallacy that might be, too,

driven by a decreasing-span-because-of-increasing-depth-fallacy, c) the misallocation-of-operations-fallacy and finally d) the simplicity-of-categories-and-lack-of viability-through-decreased-diversity-fallacy.

Terri O`Fallon in 2012 writes, that "the expansion [of consciousness] moves beyond individual experience to collective experiences, to contextual experience to experiences of the Kosmos as whole, only step out of that to find that the container that holds this vastness is nothing but a world of Mind that makes distinction" (O`Fallon 2012, p.). Here, we can see the structuralist unfoldment of paradox, where all of the three earlier meaningful operations – "[Rhema 1 part one as changing Interpretations the expansion moves beyond individual experience to collective experiences, to contextual experience to experiences of the Kosmos as whole,] [Rhema 1 part two as Action only step out of that] [Rhema 2 part one as changing of Perception to find that the container that holds this vastness]" – are present as the "nothing but", a categorization, of the more platonic and structuralist thinkers: "[Rhema 2 part two as Awareness of Sprit/Mind a world of Mind that makes distinctions]". The seeming fact that she uses two rhema or one theme and one rhema puts this passage into Luhmann`s autological stage. The grammar points towards a third to fourth phase, including adversaries and "the expansion" and "a world of Mind" as instrumental modifications in form of categories.

Since she, in her *Collapse of the Wilber Combs Matrix*, indicates her personal transition into what she calls the nondual or unified Tier, "as this wondering that seizes one's gaze as one fitfully surrenders mind to the nondual Divine that begins to transcend the kingdom of the mind that makes distinctions" (O`Fallon 2011, p. 24), the second half of the second subsection of the Unitive realm could cautiously be considered as the first nondual stage within her model.

Based on the approximation of her type and her stage, there is a likelihood of a subordinationistic mode within her model that might show up in at least four ways that lead to a) a mixing-types-with-stages-fallacy:

1. One could see, that inside perspectives in O`Fallon`s (2013) stage theory where meant to coalesced with stages showing an inability to prioritize. Thus, accidentalism and the genetic view might easily be seen as less valuable if people move into an over-generalization of seeing more Aristotelian points of view as a sort of mental disability. People might put anyone expressing process-like points of view at these two, the passive and reciprocal stages, while substance and structuralist thinking might falsely be perceived within the active and interpenetrative phases being more valuable as connected with more abilities, most prominent the power of priorization.

2. As we have depicted in the section *From second to fourth phases* and in *Further differentiation in the Unitive realms* the accidentalism`s expression of the Unitive sub-stages includes the unity of opposites within an observer, while the structuralist version includes an interpreter. The later point of view with the third between the second and first might better match "a still point centering between" (O`Fallon 2010, p. 66) a polarity and thus create the impression of a 6.0 perspective.

3. Aggravating point 2: Since, Luhmann and other Aristotelians use the shifting of boundaries and choosing one side of self- and other-reference or inside and outside as well as other dualities like transcendence and immanence, at both the first and second Unitive substage, they fit the 5.5 Transpersonal criteria "of making a choice […] [and]

'move the line' rather than step 'over the line' or 'out of line'" (ibid. p. 63) at all later stages. Whereas the Platonic counterparts already use the 6.0 criteria of having "no self at the center of this stage […] with a sense of universal connectedness" (ibid. p. 67) as well as "a deep acceptance for all of life just as it is" (ibid. p. 67) at the Construct-Aware altitude – at least Wilber does – and thus might be scored later. And this despite not expressing more hierarchical complexity but preferences for lexis and using the available grammar and operations for expressing different experiences. Abraham Maslow in the *Farther Reaches of Human Nature*, already pointed to this difference of Aristotelian and Platonic self-actualizers, where the later "speak easily, normally, naturally and unconsciously the language of being, the language of poets, of mystics, of seers, of profoundly religious men, of men who live at the Platonic-Idea level […] under the aspect of Eternity" (Maslow 1993, p. 273).

4. Since the 6.5 Illumined stage in the *Evolution of the Humans Soul* is classified as apprehending "cross floor and cross world (the concrete world of matter, the subtle world of life and the causal world of mind) patterns" (O`Fallon 2010, p. 68) an these are only foregrounded in structuralist thinkers it might be less probable or even impossible to be assessed at 6.5 for an accidentalism oriented thinker if at the same altitude or level of grammatical complexity as a structuralist and neo-platonic thinker is. As it appeared to us, themes elaborated on by outside perspectives are elaborated by inside perspectives one stage later and maybe not at all – a dependency of stage based on whether identifying with the subject or the object of stage.

These four points in combination and in respect to Terri O`Fallon`s seeming stage and personality type, at least give some rise to the hypotheses that her model could have created a typological gradient into its measures and metrics. It might therefore lead to different assessments than the assessment methodology we proposed here, which as far as possible looks at the number of used operations and creates an assessment on the basis of hierarchical complexity that is expressed within a person`s lexico-grammatical self-expression.

Figure 6 depicts the approximate correlation for the complete stage trajectory including the latest stages thus paying credit to the hypothesis that Terri O`Fallon`s model includes a mixing-type-with-stage-fallacy as reasoned in the above section. Additionally, the table makes visible that each the Pluralist or 4.0 stage as well as the Autonomous or 4.5 stage only make up for half a stage compared with the earlier ones described in Ego-Development theory. The comparatively decreased scope of both stages leads to an increase in the number of stages at the upper end of the Loevinger and Cook-Greuter scale and since this scale was adopted by O`Fallon this increased density at the upper end represents another logical inconsistency that seems to be within the sediment of her model, the b) decreasing-span-with-increasing-closeness-fallacy that might be, too, driven by a decreasing-span-because-of-increasing-depth-fallacy.

Figure 6. Comparison of the trajectory with hypothesis about Terri O`Fallon's model of human development.

The scopes and boundaries of a stage normally don`t play a major role in assessing, if each stage has its own independent descriptions and scoring criteria based on themes and topics like in the work of Hy and Loevinger (2014) as well as Cook-Greuter (2010). Contrary, if measurement is based on a repeating pattern varying boundaries and breadths of stages as well as tiers can be seen as an indicator of internal contradiction. Alternatively, there would be a need to modify the set of assumptions and principles behind the model. This could mean to include a notion that later tiers embrace for whatever reason less span. However, it is not atypical for models to commit a fallacy that leads to an increase in the number of stages at a certain point of the trajectory, mostly at the upper end: Wilber`s full spectrum model (2018)

does not depict all the earlier stages and additionally has an increased density in the middle of the trajectory and towards the end; Graves (2006) ECLET is getting very dense at the later stages and Commons (2016) MHC conceptualizes several hypothetical stages at the upper end. The reasons for such a fallacy might be twofold: a) there is increasing depth with each stages that might be confused with span – the early and late versions of a stage are much easier to discern – and b) that like with an approaching car, the closer it comes the faster it seems, and thus the closeness leads to reasoning about increased speed or hence, an increased number of stages; it is some sort of Doppler shift: the change in frequency of a wave in relation to an observer who is moving relative to the wave source. Given the assessment of Terri O`Fallon`s stage – and the hypothetical accuracy of that assessment – in the beginning of this section it is most likely that her model falls in the decreasing-span-with-increasing-closeness type of this fallacy with the so called meta-aware tier as the smallest, spanning just two and a half stages compared to the approximately eight stages of the concrete tier and the three of the subtle tier. Figure 6 graphically illustrates this observation for the mentioned models.

According to the assumptions of the here depicted model each person if once entered the fourth Tier displays the ability to express quadruplicities within one sentence rather than triads – with the quadruplicity as an ability that is displayed in degenerate form even earlier but only fully fledged within the fourth order of consciousness. Thus, it is just natural that tier models at the latest stages depict patterns of fours instead of patterns of threes like Kurt Fischer (1980) and Erich Jantsch (1979) in the culmination of the third tier who have just a degenerate fourth – a fourth which is at the same time a first: mistaken so to say. As Carl Gustav Jung (1977, p. 619) puts it in his *Mysterium Conjunctionis*: "the alchemical formula for this is the Axiom [...]: 'One becomes two, two becomes three, and out of the Third comes the One as the Fourth'". Exactly because four operations are available now, these operations can be used to dissect reality and allocate judgments within the spaces surrounded by differences – and this includes like in the natural sciences that immature explanations deceive much of reality, like the idea of a flat earth vailed the possibility to circuit planet earth. If we use our modalities of consciousness to look at something real, something with a material correlate, our stories can err dramatically and thus confine our possibilities.

To further explicate this thought we can use one of the main assumptions of a Peircean pragmatism, that is, even our subtle models of reality, like schemes of categories and orders of stages, are not only a pragmatic consensuses, but, too, have reality and failing "to recognize the reality of all the categories […] would point out the fatal defect of" (Peirce 1998, p. 181) a system. However, recognizing categories is not enough since the pragmatists summum bonum lies "in that process of evolution whereby the existent comes more and more to embody those generals which were just now said to be destined" (Peirce 1998, p. 343) – this primarily means the categories` growing into themselves and self-thematizing their own existence. And the potential reality and match with something real creates the main question each developmental model proposing repeating patterns has to face from our point of view: are its applications of the four meaningful components of the fourth tier`s operations applied in a way that matches the reality behind the surface expressions within consciousness and thus the model fulfills the destiny of our observations, reasoning and creation of stories or does it fall short of reality. Since as Wilber (2006, p. 272) puts it: "because once a level has evolved, it is a very real structure existing in the universe […] (cosmic habits or cosmic memories) [that exist] independently of any particular human and become something that all humans must confront."

Does a model come close to that which is disclosed within another sphere, does it approximate the transcendental categories that "are transindividual or collective cosmic habits,

which push against any human psychology and guide its growth" (ibid. p. 272) along a trajectory of relatively even and repeating patterns, these disclosable living realities that are not only human constructs but can carry constructs which are applied towards themselves within a functionally fitting manner? For if not: these transcendental functions and the fabric of reality becomes malformed and distorted maybe even to the degree of a rupture that might end all of humanity and at the very least creates the illusion of natural order and hierarchies where non are given – is it a tool of injustice and oppression of the facets of consciousness and evolution itself or is it their self-liberation towards itself? We can make this more tangible by an example: The famous psychoanalytic and expert in child development Margaret Mahler writes in the *Psychological Birth of the Human Infant* that "the normal separation-individuation is the first crucial prerequisite for the development and maintenance of the 'sense of identity'" (Mahler, Pine & Bergmann 2000, p. 11). A maladaptation to the child's need in this sensitive period by caregivers can lead to "the psychotic child [that] never attains a feeling of wholeness, of individual entity, let alone 'a sense of human identity'" (ibid. p. 11). In the same way are person with late stage awareness the obstetricians and midwives as well as fathers and mothers of late stage awareness and maladaptation to needs of the wards can have similar outcomes on their psychological birth into the most sophisticated forms of human consciousness and reasoning.

The original dilemma comes from our twofold condition of which pragmatism somehow describes the convergency towards absolute truth, whereas the conditioning of our mentality is better described by the constructivist schools as only seeing relatives. Both sides play together in our consciousness where the coalescence with the phylogenetically grown absolute reality, the application of these transcendental functions or stage and tier operations habitual to our cosmos, can only produce contingents, actualities that can always be imagined to be different, since they are based on each observer's observations within a merely closed ontogenetically formed system as well as in its structural coupling with certain modes of societal discourse and self-thematization. As far as "everything that is happening in a living system, in the factual operations of its elements` properties, […] operates solely in the present that is, it is determined by the structures, which it possesses in the moment of its structural self-realization" (Maturana 2000, p. 182f) each living system and consciousness is challenged by a special condition when the tier operations are turned back on themselves – when the relative tries to grasp the absolute, when the object apprehends the functions of the subject, or the inside looks towards its outside: contrary to observations of other mental realities, that are as interpretations and imaginations quite subtle and fluid and represent no absolute truth but generate truth in hindsight, the observation of the subject itself is an ongoing observation turned back on the quasi eternal truth of the substance these categories are. Thus, where the form tries to recognize its media, that means the accidentals their substance, contingency is contingent to what it`s contingency is built of and irrespective of this condition tries, within that contingency of its descriptions, to recognize the unconditioned and essential. The recognition of the underlying substance or transcendentally structured ground of consciousness that was involved into our brains and minds by millennia of evolution, which are therefore to a certain degree habitual, material and solid. Missing them thus can deteriorate the reenactment and reappropriation of evolution with itself and its merely permanent grooves as the involutionary structures we enact in our very consciousnesses similarly to the idea of a flat earth which did thwart the discovery of new shipping routes.

The idea that stages and patterns are cosmic grooves opens up the possibility for an inconsistency that we can call the misallocation-of-operations-fallacy. While the allocation of the operations to the world is more a creative and constructivist endeavor, the search for the best stories and descriptions of the autopoietic processes that generate their own criteria of beauty,

truth, clearance and goodness able to ride on the surface of the original transcendental media – a media that is generalized by the functions of the tiers and their grammatically and thus adaptative, differential, integrative and self-thematizing possibilities – looking at consciousness itself has like the natural sciences a clear restrictedness through reality, where ships don`t find routes or even worse the miscalculation of an equation can lead to devastating effects – like the meltdown of a reactor or a psychotic child or deformed late stage adults despite the best intents of the actor. A model in this set of assumptions generates its aggregate value fourfold: a) by enacting creativity within the discourse and making it adopt to better stories, b) by reappropriations of what is real beyond the purely contingent, however contingent and ever-unfolding the reappropriation is, c) by potentially or eventually changing the mode of integrating ourselves into these media and generating new forms of enacting and synthesizing through these categories and last but not least d) to discern whether or not theses reappropriations serve the harmonization and maintenance of the evolutionary whole or leads to its deterioration. Both approaches thus not only relate to different truths and means-ends orientations but, too, to different imperatives when it comes to the conceptualization of models – despite being intriguingly connected. Since tending towards describing the absolute truth behind the contingencies can lead to absolute errors it needs absolute imperatives and practices that lead to the best possible reappropriation of the invisible. Figure 7 graphically illustrates the considerations about the misallocation-of-operations-fallacy.

Transcendental Substance
e.g. from Phylogenesis Involved into Brain

1st Tier Substance:	2nd Tier Substance:	3rd Tier Substance:	4th Tier Substance:
·	·—·	△	⬚
1 Tier Operation e.g. Perception	2 Tier Operations e.g. + Action.	3 Tier Operations e.g. + Interpretation.	4 Tier Operations e.g. + Self-Thematization.

Contingent Observations in Search of Living Reality

1st Tier Models:	2nd Tier Models:	3rd Tier Models:	4th Tier Models:
·	·—·	△	⬚
1 Meaningful Component As e.g. Perception.	2 Meaningful Components since e.g. + Action.	3 Meaningful Components from e.g. + Interpretation.	4 Meaningful Components within e.g. + Self-Thematization.

Structurally Determined Observer
e.g. from Ontogenesis Involved into Brain

Nondual Transcendentally Generalized Web of Grammars as Foundation of Discourse of the All with the All

Models 1 Pragmatism > Constructivism:
Apply Operations towards Recognition of Substance

Models 2 Constructivism > Pragmatism:
Apply Operations towards Description of Contingencies

Truth as Absolute:
Consequences through missing Absolute

Truth as Relative:
Consequences through too partial Narratives

Consequences as Absolute:
Deformation of Existence

Consequences as Relative
Different Existence

Absolute Imperative:
e.g.
absolute Discourse-Ethics,
absolute kategorial Imperative
„The Application of Operations towards
Matching Everyones Absolute"

Relative Imperative:
e.g.
relative Discourse-Ethics,
relative kategorial Imperative:
„The Narration that can be
Everyones Narration"

Figure 7. Two ways of creating models of reality and their implications.

One seeming absolute imperative creates the possibility for d) the simplicity-of-categories-and-lack-of viability-through-decreased-diversity-fallacy. As Zachary Stein and Katie Heikkinen (2009) write in *Models, Metrics, and Measurement in Developmental Psychology* privileging of "deep-structural properties indicative of development […] allows us to measure and assess development in many lines using one metric" (Stein & Heikkinen 2009, p. 12) but at

the same time models doing this "dubbed structural properties as indexes of development: for example, they privileged attention toward properties like differentiation/integration, concreteness/abstractness, simplicity/complexity" (ibid. p. 12). The priorization of a complex web of measures that are not only aligned with each other but calibrated across different models – for the realm where models with metrics and measures exist – and authors' life works decreases the overall value and worth of one measure and thus reduces risks. Similar to a hedge-fund on the financial markets, the bundling of investments that have a dispersion across markets and economic sectors, the bundling of metrics and measures reduces risks especially those generated by our very human nature`s typological and cultural biases. The whole point, too, can be broken down into Ashby's (1956, p. 207) law of requisite variety: "Only variety in […] [the measures] can force down the variety due to […] [the diversity of humans]; only variety can destroy variety". This is what we call d) the simplicity-of-categories-and-lack-of viability-through-decreased-diversity-fallacy.

The fact that Terri O`Fallon`s model basically has crystallized out of the soft measures, "metrics with mainly qualitative standards for determining the amount of a trait" (ibid. p. 7), derived from Cook-Greuter and Loevinger, a mere mono-logical arising from only one tradition of measurement combined with the reduction to only three variables for measurement – tier, individual vs. collective and ability to prioritize or not – as smart and elegant it might seem could even increase the vagueness of "meaning making assessments […] [which are anyway already] expected to be a bit fuzzier and imprecise, compared with application of Skill-Theory" (Murray 2017, p. 52) and other grammar-based assessments in general and thus decrease the viability of the overall scheme of transcendental truths behind our observations and distinctions.

This fallacy or rather taken risk – if the reasonings in this paper are partially or completely true – might be responsible for all other fallacies since they are all easily avoidable through a discoursive approach that considers multiple models and metrics and thus enables oneself to apprehend errors within one`s reasoning through the multiple voiced field of knowledge surrounding each observer as his or her milieu. A pragmatist`s perspective has to be a consensus both with others and with what is ultimately real and true behind or as the media that consciousness is – a state of nonduality that is the prerequisite of a discourse of the all with the all or the self-thematization of human mind in a larger field or the social sphere – which is only possible through a discoursive approach – since oneself is always merely an individual rather than a general.

The comparison with other models can, additionally to pointing out the comparatively uneven and premature tier-shifts, question some other basic assumptions of Terri O`Fallon`s model. We already mentioned that passive language seems to be possible across all stages and all phases. Too, if there were a tendency for passive language would this be an indicator of a person's ability to prioritize? For Kohlberg the priorisations-pattern would look completely different: for him the person at moral Stage 6, which should approximately correlate with the 5.0, i.e. Construct-Aware stage, is "able of completely reversible 'role taking'" (Apel 2016, p. 331), which can lead to principles of justice like Kant`s categorial imperative and Rawls principle of justice as fairness. It is the priorization of an internal or external discourse with a difference of actuals and possibles and a purpose which is suspected to make ends meet. One`s stage 6 "moral point of view, from where the individual can orient itself within the questioning of right and justice" (Apel 2016, p. 321) allows to prioritized certain universal principles that serve as meta-rules for discourses or internal practices that not only see one point of view but are "the perspective of a 'moral point of view', from which societal order is derived […] that accepts that each person is a purpose in itself" (Kohlberg 1996, p. 132). This is an ability

which Kohlberg saw lacking within the assessments of people at moral stage 5 – O`Fallons interpenetrative and therefore prioritizing stage. These individuals could apprehend to procedures or contextual rules "that integrate different perspectives through the mechanisms of formal agreement" (ibid. p. 131), but still only through one`s own or larger systemic context`s point of view. Contrary for O`Fallon the Construct-Aware individual is denoted as passive "with little ability to prioritize any of the constructs that one is seeing" (O`Fallon 2010, p. 61).

Again, this incongruency is owed to the seeming premature tier shift compared to the depicted model in this paper. Since for Apel (2016) and Habermas (1990) moral stage 6 and thus construct aware was a stage of complete reciprocity within the abstract realm, it would rather be depicted as collective than individual and the foundation for priorisations thus is collective as the grammar of the action oriented and beneficiary applicative as well as derived intransivity could indicate – a mode of priorization that might be less visible when one looks at the stage as centering around a 1st Person.

But how could one explain the seeming misallocation-of-operations-fallacy and thus the different Tier-shift? We already mentioned that for Hegel, Luhmann and others the first and fourth within a tier are most similar to each other, even though they are basically opposed to each other as being subject and being the pure subject as I-I or being the substance of the me, you and all, the self-thematization of a system including even what it negates or excludes as its boundaries. Since the fourth in the subtle tier is simply degenerate and cannot be completely present within three meaningful sentence parts performing a quadruplicity the expert and construct aware match each other in so far as they both can hold two poles through a third: the 5.0 stage with two subtle poles as the "both… and… and the relationship of both to each other" and the 3.0 stage as the mental holding two sides or operations of the concrete. Figure 8 illustrates this similarity.
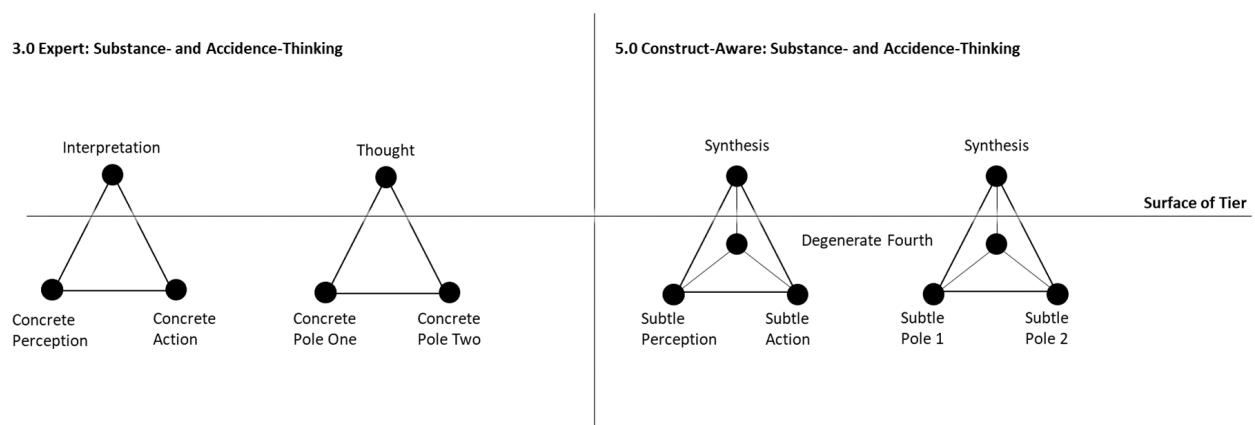
Figure 8. Similarities between the 3.0 Expert and the 5.0 Construct-Aware stage.

However, all of this were not a problem if not an even overarching pattern was asserted which if it existed misallocated at least an individual or adaptative stage where a collective stage of full reciprocity should be according to other models and an even iteration of the quadruplicate tier pattern – a flaw that surely generates an upward domino effect. Additionally, the distribution of four stages into two and a half potentially leads to further maltreatment of assessed persons and only works through other biases like the type-stage-fallacy as long as the reasoning depicted in this section is scientifically sound and further supported by other observers.

Table 11. Potential Fallacies committed within Terri O`Fallon`s Model.

Fallacies that might be Committed	Characteristics and potential Effects
Mixing-types-with-stages-fallacy	Seeming subordination of Inside Views →At least delayed stage shifts for Inside View persons →Unnatural hierarchies and power structures (punishment of persons with an inside view on reality)
Decreasing-span-with-increasing-closeness-fallacy	Increased Number of Stages at the top →Uneven Tiers and misallocation of operations →Measurement with repeating patterns of passive, active, reciprocal, interpenetrative should be logically impossible without perceptual biases that distort assessments towards expected outcome
Misallocation-of-operations-fallacy	The seemingly existing repeating patterns or tier-operations are misallocated →Uneven Tier Shift and mismatch with deeper reality →Potential maltreatment of people
Simplicity-of-categories-and-lack-of-viability-through-decreased-diversity-fallacy	The seeming cause of the hypothesized problems as lack of fourth tier discourse orientation and oversimplified as well as overgeneralized measures →Inadequate management of scoring risks →Threatening overall health of universal trajectory

O`Fallon`s and colleagues` (2020) latest publication which claims the validation of her new scoring method allows us to take a look at how both our systems come to same or different results in scoring since "Appendix 3: Scoring samples from the Concrete, Subtle and Met-Aware tiers" (ibid. p. 12) includes scoring examples.

1. "At times I worry about… the future of my country." (O`Fallon et al. 2020, p. 12) was scored at subtle, individual, active 3.5 Achiever and would be a second to third quarter, third tier, first stage score by the here depicted method, thus Expert. It includes only one abstraction and is written in an accusative-possessive language. Concomitantly Hy & Loevinger (2014) rate the completion "…the future of the world" at E5 Expert through scoring category 5r contrary to scoring category 6r E6 Achiever "…the future of society and, indeed, of civilization" including two abstractions.

2. "Change is… inherent in living and connecting in the world; it prompts me to shake myself off from the slumber of consistency and embrace the excitement of newness" was scored at subtle, collective, reciprocal 4.0 Pluralist and would be fourth quarter, second stage, third tier and therefore exiting Achiever with the here depicted method. Though, depending on the overall assessment it might be interpreted as a single "both...and" phrase of "living and connecting" and to continue with another "both…and" of "prompting to shake of" and "embrace the excitement" and henceforth would include three abstract components in one meaningful composition – a Pluralist or Autonomous rating it is more likely that we deal with an Achiever version of

"both… and" or exiting stage "unity-between-opposites" insofar as "to shake myself off from the slumber of consistency" and "embrace the excitement of newness" are merely coextensive or synonymous and only a reference switch or co-subordinate to each other.

3. "When I get mad… knowing that uncontrolled unleashing of the power I now access can create undesired damage, I recognize the feeling tone in my awareness and I take myself on, stepping toward what brought on the anger, as I know that the emotion points at the growing developmental edge I have asked the universe to stretch" was scored at met-aware, individual, active 5.5 Transpersonal and would be a third to fourth quarter, first stage, fourth tier and thus Unitive response. It includes four components "[First Component knowing that uncontrolled unleashing of the power I now access can create undesired damage,] [Second Component I recognize the feeling tone in my awareness] [Third Component and I take myself on, stepping toward what brought on the anger,] [Fourth Component as I know that the emotion points at the growing developmental edge I have asked the universe to stretch]" including a lot of dative and locative grammar within the oneness of two opposites: "the feeling town in my awareness makes me take on stepping towards the anger an outside and at the same time it is my inside, the developmental edge I have asked to stretch".

4. "Women are lucky because…as the canvas they contribute to the Universes' particular paintings in the Sacred's art gallery by continuously receiving the brush of many colors, and thus are formed by the timeless, never ending layers of humanity's pigment" was scored at met-aware, collective, reciprocal 6.0 Universal and would be scored at fourth stage, fourth quarter of the third tier, at the late Construct-Aware stage. It includes only three components organized in an instrumental fashion: "[First Component as the canvas they contribute to the Universes' particular paintings in the Sacred's art gallery] [Second Component by continuously receiving the brush of many colors,] [Third Component and thus are formed by the timeless, never ending layers of humanity's pigment]"

Here one could again evidence a type-stage-fallacy: the inside view "oneness of opposites" at the first Unitive stage is assessed at an earlier stage then the outside Construct-Aware completion that is using overly spiritual and metaphoric language as we already know it from the conflict within the Aristotelian and Platonic writing traditions: where earlier is famous for its syllogistic reasoning as well as carving out of principles while later is known for its rich analogies and metaphors.

Final Overview

Within this paper we moved through Luhmann`s career as a systems-thinker. We started from the. Achiever, and ended with Unitary, so far as we use the terminology of Susanne Cook-Greuter. We could see changes in grammar and changes in conscious preoccupation, as well as these in interpersonal mode and character or identity development. Anything we found was already pointed out by Luhmann himself. In one or the other way we rode the web of his life with the sparkling horses of anything but only him. We silently assumed many things and we put into words some others – we coded and decoded into their own semantics a number of texts. These are listed in the final table. We cross-referenced not only with linguistics but with thinkers of other domains, too, depicting something that still can be doubted and should so. As it is only a web of grammars and words: a contingent within contingencies trying to apprehend in a reappropriation the universal substance we are made of in order to serve the re-

duction of complexity, operationalizing a life that can sustain itself through creating new and more adequate complexity.

If there is one more thing to mention – as Luhmann shows in an extraordinary way: stages don`t disappear once lived through, they always stay and have to be cared for and nurtured and re-entered to resolve the paradoxes of life. Table 11 shows some of the highlights on his fruitful path we investigated here and from which we were so richly nourished.

Table 12. Some of Luhmann`s writings depicting his life as a writer and across several stages.

Stages			Books on the Trajectory					
Achiever	Goal-Oriented	3rd Period						The Formal Organization (1964)
		4th Period	Basic-Rights as Institutions (1965)					
Pluralist		1st Period		Right & Automation (1966)				
	Integrative	2nd Period			Science of Administration (1966)			
Autonomous		3rd Period				Trust (1968)		
		4th Period					Rationality of Systems (1968)	Proceedings (1969)
		1st Period	Sociological Enlightenment I (1970)					
Construct-Aware	Self-Thematizing	2nd Period		Political Planning (1971)	Sociology of the Right (1972)			
		3rd Period				Power (1975)	Systems-theory of Society (1975)	
		4th Period	Societal Structure & Semantics I (1980)					Function of Religion (1977)
		1st Period						
	Observing	2nd Period		The Welfare State (1981)	Societal Structure & Semantics II (1981)			
		3rd Period				Social Systems (1984)		
Unitive		4th Period	The Economy of Society (1988)				Ecological Communication (1986)	Knowledge as Construction (1988)
		1st Period		The Science of Society (1990)				
	Autological	2nd Period			Observations of Modernity (1992)	The Morals of Society (1992 to 1995)	Theory of Society (1997)	
		3rd Period	The Religion of Society (unfinished post hum)	Organization and Decision (finished 1998 post hum)				The Politics of Society (unfinished post hum)
		4th Period						

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