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Language Art

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"Art" (in the singular) is an imprecise cluster term from everyday speech and the language of education. For a consideration of the biological requirements of "art", I recommend distinguishing between at least two levels. The first, more general level relates to a characteristic that one can ascribe to all the arts, namely the playful use of innate dispositions, which is not motivated by direct intentions, but rather by pleasure (*cf.* Tooby/Cosmides 2001; Eibl 2009b). The intrinsic reward system honours the exercising and use of our adaptations, even if we engage in this purposelessly and just idling, because it serves to practise and to calibrate the respective skills. Admittedly, this description includes activity that stretches far beyond the academic scope of the term "art" and also relates to the "art" of playing football or TV entertainment. In this playful use, it is possible to integrate contents that are closely connected with the value horizons of certain historical epochs and societies, and represent a type of second seriousness.

On a second level, one may place various *arts* with material-specific focal points, which use this general skill of playing. Between these levels, one could also insert a difference between semantic and non-semantic materials/ arts. Systematically non-semantic activities such as e.g. abstract art or Islamic arabesque art should be limiting cases. It is similar for instrumental music in the 19th century to the extent that it understood itself as a "form moved by sound" ["tönend bewegte Form"] (Hanslick 1854) and distinguished itself from opera or programme music. The joining of certain sound sequences and combinations with certain moods also lends it a semantic element. It appears that all arts have at least a certain tendency to semantic use.

The art with semantic material par excellence is, however, undoubtedly the art of language. In the following, I will limit myself to it. The universal seman-

tic character of language grants it a special position as material to be played with: In language, almost everything we find in the world can appear again as an idea or conception ("representation") – and furthermore, even some things that we do not find in the world. The fixing of a subject in language creates a shared world view, a large intermediate world [*cf.* Eibl 2009, "Zwischenwelt"] of prior agreements and "knowledge" that we describe as "culture". As one may describe colours and forms as the material of the fine arts, and sounds as the material of music, so too can one describe culture as the material of language art (and the semantic component of other arts). Poetry would then be a playful treatment with (linguistically fixed) culture. Accordingly, it is important to shed a more precise light on the relationship between language and culture.

1 Language and culture

1.1 The function of semantic culture

An elegant, but less sustainable solution to the problem of how biological evolution and culture relate to each other involves the discussion of biocultural co-evolution or gene-culture evolution. But when we follow the currently relevant out-of-Africa hypothesis, then the evolution of *shared* characteristics of the species *Homo sapiens sapiens* ended approximately 100,000 to 40,000 years ago, as the species spread from Africa across the entire earth. After that, there was hardly any chance for appreciable co-evolution (if we don't assume unknown world-wide alternate migrations). The standard proof for the later gene-culture evolution such as the lactose tolerance of pastoral people, the adjustment of skin colour to the sun exposure in the north of the dispersion area or an increase in the haemoglobin level of the Himalaya peoples are examples of *regional* developments that nobody disputes.

With the gene-culture co-evolution hypothesis, one can explain early developments of technical culture (tool use, taming of the fire, etc.) and their impact on somatic evolution, but one does not make it past the Neolithic threshold nor into the last 400 years, i.e. the time that is distinguished by a very special level of technical development. And the semantic component of culture has not even been addressed yet: the broad area of communication, rule, instruction, art, religion, tradition, etc., which includes a culture's "available meaning that is generalized on a higher level and relatively independent of situation" or its "inventory of available meaning processing rules" [den „höherstufig generalisierten, relativ situationsunabhängig verfügbaren Sinn" einer Kultur bzw. ihren „Vorrat an bereitgehaltenen Sinnverarbeitungsregeln"] (Luhmann 1980, p. 19). This semantic component not only arches over the technical component and its biological preconditions as an interpretive framework, but it also provides reasons for the conjecture that it facilitated the partial decoupling of culture from the co-evolution context.

An understanding of culture, which makes the importance of language for culture especially clear, can be found in the considerations that William James presented in his *Principles of Psychology*. James was one of the first psychologists to consider evolution as an important factor in the emergence of the human psyche. While mainstream psychological and social opinions assumed almost to the present that somehow humans' instincts were reduced, switched off, etc., James modelled it differently: Humans had not less, but rather more instincts than animals. The point of his conception is not the quantity, but the relation of these instincts to each other. They do not form a harmonious ensemble, but rather *contradict* each other. The reason for this is the complexity in the circumstances of higher animals that can no longer be overcome by "hard wired" instincts. "Since any entirely unknown object may be fraught with weal or woe, Nature implants contrary impulses to act on many classes of things, and leaves it to slight alterations in the conditions of the individual case to decide which impulse shall carry the day." The evolutionary technology that was used here to manufacture elasticity and plasticity is based on the instincts, but it brings them into an antagonistic relationship. "They contradict each other – 'experience' in each particular opportunity of application usually deciding the issue. *The animal that exhibits them loses the 'instinctive' demeanor* and appears to lead a life of hesitation and choice, an intellectual life; *not, however, because he has no instincts – rather because he has so many that they block each other's path*" (James 1890, p. 393).

James formulates this constellation for all creatures that are capable of gaining individual experience. It is characteristic for humans, however, that their behaviour is also informed by group experiences. Semantic culture can then mean *the collectively preserved, processed and available experience.* In the context of other models, it is the "cultural knowledge" (Titzmann 1989) or the "cultural memory" (Assmann 1997) that forms the core of culture, or what Tomasello now describes as "common ground" (Tomasello 2009).

1.2 Innate or acquired? Primacy of object or person?

Such culture is, however, inconceivable without the achievement of language. Naturally, there is also animal communication. But there is no indication of the fact that animals use their "languages" to construct stable world views that would be comparable with humans. Humans can evidently thank their language skills for the possibility of creating extensive shared reserves of experience. A glimpse at the evolution of language skills can lead us to a critical difference between the language of human people and the means of non-human communication.

Reflection on language from an evolutionary point of view has gradually gained traction in recent decades after being dismissed by behaviourism. Noam Chomsky, who was considered *the* representative of Nativism for a long time and held the opinion that linguistics is essentially a division of biology, still wanted nothing to do with evolution theory. This resulted in the curiosity of biologism without evolutionary theory (Pinker and Bloom 1992). If one wants to bring the nativistic concept into contact with the diversity of the individual languages, then one will search less for a "universal grammar" than for universal programmes that regulate the *emergence and acquisition* of these individual languages. Derek Bickerton (1981) developed the concept of a "bioprogramme" for *language acquisition* from his studies of Creole languages, and he also tried in multiple models to promote evolution theory. In the meantime, the pendulum seems to have swung to the other side. A type of moderate neoculturalism is appearing in the question of the emergence of language. Michael Tomasello (2002) wants to make language(s) in the narrower sense again purely cultural products, confidently ignoring Bickerton (and some others), and has gained the sympathy of some scholars in the humanities as a result. He, too, of course, cannot fail to consider the biological building blocks and biologically developed functions so one cannot really speak of a change or even a cultural turn. Each language development theory today must assume both species-typical human abilities of an innate type and cultural variables. The various conceptions differ only in the extent to which and the way in which the innate dispositions penetrate the individual languages.

Another (apparent) difference lies in the question of what in general the adaptive achievement of language is. Here, too, a kind of Solomon-like consensus dominates to the extent that a multi-functionalism of developed languages is recognised. Differences, however, result when it comes to the

dominating achievement that was responsible for the emergence and establishment of human language.

Roughly speaking, one can differentiate between reference to people and reference to objects. The thesis of the primacy of the reference to objects can be taken up from Bickerton. In a *Spiegel* magazine interview, Bickerton described his position in an appropriately simplified and focused way. The beginnings of human language, according to him, were due to the challenges of moving from the rain forest to the savannah. If, for example, a troupe of 8 or 10 people found a mammoth carcass and wanted to notify the group of this – Bickerton assumes 30 to 40 individuals – then some form of symbolic communication had to be used. Bickerton conceives of it as follows:

> BICKERTON: [...] Imagine a prehistoric man finds a mammoth carcass and returns to his own people. Then he could have said "Oooochchch" and done this ... (demonstrates tusks).
> SPIEGEL: I see, so the first human word was "Oooochchch" and means "mammoth"?
> BICKERTON: Why not? In any case, it was certainly not "hello" or "good-bye", as you would have to assume if the ongoing development of social intelligence were the driving force behind the development of language. (Der Spiegel, 2002, No. 43, p. 225.)

But one cannot leave this exclusion of politeness untouched. Jane Goodall has already described that her chimpanzees greet each other when they meet again after a separation and that they encourage a broad range of greeting gestures (Goodall 1971). Were original humans really less polite than chimpanzees or our dogs? One can safely generalize: The greeting is an important measure for establishing trust in all pack and herd animals. The first words in the original situation imagined by Bickerton were probably: "Hello, Oooochchch". "Hello" would be the inheritance from animals, "Oooochchch" however would be the human addition, which is the issue here.

The other theory proceeds from the primacy of the relation to people. In recent years, Robin Dunbar's conjecture has gained a certain degree of popularity (Dunbar 1997). It views human speech as a type of continuation of evolution and an expansion from the grooming of other primates to gossip among humans. The size of the human brain has been estimated for groups of people with approximately 150 individuals, and communication between 150 individuals cannot be achieved with grooming. This thesis has two strengths and two weaknesses. The strengths: It is a continuity thesis and places one

achievement in focus, thereby letting it be meaningfully linked to evolution theory. The first weakness (see Eibl 2004, pp. 191-194 for a detailed critique): Why did humans join together into larger groups in the first place? All of a sudden there were not 150 people who urgently needed a new means of communication and therefore discovered language, but rather the gradual growing of groups (and the brain) and the emergence of human language developed hand in hand and were mutually dependent. Certainly, the reference to objects as a selection advantage also had an effect here. The second weakness is connected with this: Grooming and gossiping are not only quantitatively very different. The only information that is conveyed through grooming is: "I like you". Gossiping, on the other hand, also provides *information about third parties* – who may have done what with whom for what reason. And finally, the presumably early additional services of language that were required for survival also included messages of the type: "Behind you, a leopard is stalking", which one can hardly communicate by means of grooming, but probably through noises or signs as those that already belong to the communicative abilities of our co-primates.

1.3 From Sign language to Speech

Communication is not solely dependent on speech. There are also the media of the other senses. The tactile medium, i.e. the grooming, is also still used successfully by people today for certain intimate purposes. Furthermore, there is/was the visual medium that has also been observed in recent years from an evolutionary point of view. For good reason, one conjectures that one origin of language lies in communication by mimic and sign (*cf.* Niemitz 1987, Corballis 2002, Fehrmann and Jäger 2004, now also Tomasello 2009. Jäger 2009 provides a summary). The release of the hands through the ability to walk upright gave us great advantages over our four-footed cousins and facilitated very diverse means of expression. Tomasello sees, particularly in the pointing gestures, a very important difference between humans and animals. Dogs can learn and follow human pointing gestures; chimpanzees can also make these gestures, but they only use them with respect to people and only "imperatively", i.e. when they demand something (other gestures belong entirely to the repertoire within species). For people, on the other hand, pointing gestures are evidently a part of the innate communication inventory, and their function is not (only) that something is required, but rather that they are used in order to draw attention to something. Their function is to produce

collective knowledge (the aforementioned common ground) through drawing attention to something, which in turn facilitates collective, intentional action.

On this basis, as we see in today's sign languages for the deaf, it is possible to build very high-performing languages. The development begins with involuntary, innate display functions that can also be observed in animals. It can be complemented by representational (iconic) elements which are presumably a privilege of humans, and it can then also operate with conventional-arbitrary descriptions. Our modern sign languages already presume the arbitrary character of vocal languages as the model. Whether one can also ascribe to early humans a highly developed sign system with notable arbitrary values, is doubtful. That at last (when?) the acoustic language prevailed and the other channels became secondary, requires an evolutionary explanation.

Initially, one must assume that two means of expression existed side by side. Today, spoken language is almost always accompanied by supplementary or emphasising gestures, and similarly, the early sign language was probably supplemented by sounds. An initial advantage of the acoustically conveyed language is that spoken language works without eye contact. That multiplies the spatial chances of successful communication, namely by making oneself understood to the right, left, behind, through obstacles and, above all, in the dark. Furthermore, it is possible to regulate the volume, to communicate confidential information quietly or to convey other information by raising one's voice or even screaming to hundreds. Those would be the initial advantages that could promote at least an equal coexistence of both channels.

These advantages would hardly have been sufficient in order to justify today's dominance of the acoustic channel, since there was an important hurdle on this evolutionary path. When speaking, humans operate with an oral cavity that strongly differs from that of other primates. In particular, we can articulate the vowels with far greater variations than our cousins. Together with the large oral cavity, an increase in the curvature of the skull base and the deep position of the larynx are responsible for this. However, that has its price. While the larynx cover and soft palate form a thick seal in chimpanzees so that they have no difficulties swallowing and breathing at the same time (human infants can do this, too), humans must always decide whether they want to breathe or want to consume something. If they make a mistake, then they choke, start coughing or, if it ends very badly, suffocate. Simultaneous to the increase in the oral cavity, a corresponding mastery of the fine motor skills had to be developed, specifically: A large number of people suffocated

before we had such a patented speech organ. That the human articulation tool despite such costs prevailed evolutionarily, is a clear indication that oral language also must be connected with a corresponding benefit.

Initially, the spoken language, however, appears to be characterised by a fault. The acoustic channel can only be linked with "natural" signs to a limited extent. Certainly, we could imitate the twittering of birds or the roar of a mammoth. But we would soon reach the limits. In Bickerton's example, the acoustic description – roaring – had to be made more precise with a gesture, since much roars in the savannah. Only once the returning prehistoric man formed the completely random sound "mammoth" was the animal described in a concise, precise way. But, here, we see the advantage of the acoustic language signs. It lies in their "artificiality" (randomness, arbitrariness, conventionality). It makes it possible to build the language representations of the world into entire systems depicting the world, and relatively independently of the forces and needs of the moment. Pure iconicity is, of course, impossible without this. The difference of arbitrary/iconic, as used in the present explanations, is also not very precise and only owed to the wish for quick understanding. Iconic descriptions are not e.g. true, "natural" depictions of reality (*cf.* Nöth ^{2}2000). Even with very simple iconic depictions, it always depends on which part of the illustrated object one considers relevant! In the case of Bickerton's mammoth, it is the large tusks, but it could also be the trunk. As long as the primitive man did not drag the entire carcass, the representation always contains an arbitrary-conventional element. This unavoidable element may also have been the starting point for an earlier, arbitrary gesture language. But the critical release is thanks to the establishment of the acoustic channel's dominance, which was able to preserve the only still comparably minor remains of the iconic (Corballis 2004, 186). *The lack of iconic or pantomimic plausibility must have been compensated by an increase in the conventionalisation of the signs.* The consequences of this release and its new determination were immense and definitive for everything that we call human culture. Since the possibility of the *symbolic* relationship to reality is achieved with conventionality/arbitrariness.

2 Construction of a continuous world

One can also speak of absence with conventional signs, or about the countryside behind the mountains or yesterday or even about God and the universe. The simple reference to an absent mammoth carcass is also possible by means of finger gestures, but it assumes the possibility of physical contact. If I follow the direction of the pointing, I come to the Oooochchch. This possibility disappears with increasing temporal and spatial removal: An iconic or pantomimic arrangement for a hunt the next morning is far more difficult and will hardly be possible without the aid of symbolic-conventional elements. If it involves the harvest in the coming autumn, one will no longer manage with iconic signs. Here a central service of the arbitrary-referential language takes effect: objectification, i.e. the ability to lend a non-present thing the status of an object (*cf.* Eibl 2004, pp. 233f.).

Not present in the sense of physical inaccessibility is in any case the past, although hardly anything else is/was so real. All experiences are such due to the past. But their object character can only be recreated with language representation. The most important method of such representation is telling as a link between the fact and a not-random totality. Since iconic languages are already at a disadvantage, because they only have one conjunction, the "and" with which we place things next to each other. The exceptionally fruitful links with "because", "if...then", "in order to", "but", "so that", etc. are only possible with conventionalized signs. Telling lives from such conjunctions – spoken and not spoken – and it can therefore only exceed the bounds of "and" in the acoustic medium. Here, then, also lies the foundation of human cultures through objectified language: One can understand cultures as an aggregate of stories that explain the world according to cause and effect.

Likewise, only in non-iconic media is it possible to abstract. In reality, there is no species *Mammuthus africanavus*, but rather only individual mammoths. In the abstract form of stored knowledge about "the" mammoth, it is then possible to apply plans for the future. The "future" is, however, likewise not possible to depict purely iconically. It would also be impossible to indicate conditions of application for statements through solely iconic means, i.e. to depict statements that could be made into the object of statements (*cf.* Cosmides and Tooby 2000, also Eibl 2009, pp. 54-56, on the complex of metainformation). Only if one uses arbitrary-conventional means can one combine new meanings, discuss the truth of statements, identify shared areas of imagination as such and forge joint plans or complete experiments, tell each other dreams, or lie to each other through false identification of the area of application for propositions...

The possibilities of emotional expression are also expanded. The literary world is full of complaints about the fact that one cannot share the innermost

part of one's soul. "When the soul speaks, alas, it is no longer the soul that speaks" [„Spricht die Seele, so spricht, ach schon die Seele nicht mehr,"], said Friedrich Schiller. Frequently is then the possibility of a language without words contemplated. That is by no means bizarre. It is an illusion however to think that this language without words would be capable of more than one with words. There may be involuntary display functions in people that provide information about a "natural", symptomatic way of emotions (Ekman 2007; Eibl-Eibesfeldt 2004, pp. 513-576). They can also be used intentionally and then have iconic quality. Joy, sadness, fear, disgust, mistrust, annoyance and similar may be expressed and perceived thereby. But the repertoire of these languages without words remains limited to a basic stock of emotions. What Moses Mendelssohn called the "mixed feelings", is much too complex for this means of expression, not to mention a linking with objects/ causes; with this, one cannot express what someone is suffering from or what he is happy about or *what* he thinks. The theory of mind, i.e. that our idea of cognitive internal emotional processes of other people, can only be served to a modest degree by such means. We may attempt to determine intentions from the direction of a gaze, from the frequency of breathing or from involuntary movements, and the partner can at least make the direction of his gaze more explicit through corresponding pointing gestures. But oral communication through arbitrary signs is much more effective here. The cultural work of many generations has established a network out of names that have been reaffirmed constantly by conventions. In German, for example, mysticism and Pietism enriched the vocabulary by adding many descriptions for internal emotions, the religious origin of which we no longer even know. Such traditions facilitate not only the communication and determination of different states of the soul, but rather they can also have an effect on it, and regulate thoughts and sensations in accordance with their communicability, since emotions "in and of themselves", of course, only last as long as the occasion that produces them. Through their fixing in language, even if it is imperfect, they enter into a new state, become semi-tangibly persisting components of the person.

Humans' relatively enormous time horizon is a type-specific peculiarity that emerges on the basis of his language. In the biologically oriented psychology of Norbert Bischof, this peculiarity of humans appears under the names of anticipation, secondary time and permanence (Bischof 2009, 378-387). It involves not only the ability to remember individual events as we naturally may assume for other creatures, too, but rather the assumption of a continuous

world that also exists independently of the current urge state. I myself have tried to summarize the matter under the term of intermediate world and trace it back to the representation and objectification function of the human language (Eibl 2009a): This facilitates the "representation of non-present sequences of events" [„Vergegenwärtigung nicht-gegenwärtiger Ereignisfolgen"] (Bischof 1985, pp. 450) and places us in the position to construct "reality" beyond the present moment or the current process of action and conserve it as shared "knowledge". This also applies to our behaviour with ourselves: To the extent that we try to design ourselves as a language construction, we "know" about ourselves and give ourselves continuity and objectification beyond the moment of the experience. The construction of the human world is defined by the fact that a continuous I (I am not speaking of "identity", because that does not describe the matter precisely enough) must cope with a continuous environment (including other continuous Is).

I go back to the comments made on James: Only with oral language and its symbol and objectification services released from iconic bondage is it possible to conserve past experience intersubjectively as knowledge in tradition and thus ultimately to develop into culture. This knowledge fixed in language is mapped onto the world as a system of images and creates a type of intermediate world. It is linked to the world through references, but since the representation of the world is in its symbolic, convention-based way, it is simultaneously arbitrary.

For a species that uses culturally contingent definitions beside and outside the concretely arranged behavioural schema, a consensus on these definitions must repeatedly be produced, and usually by means that give this consensus the appearance of the "natural". Volker Heeschen reported on the conversations of the Eipo in West New Guinea, saying that instructions, requirements, directions play a notably smaller role. One usually speaks about trivial subjects that the partner already knows without this. Our idea that language serves the current coordination for our actions and the conveying of new information may not be false, but it only applies to a part of language's functions (Heeschen 1988, pp. 208). Its use also serves, in an important way, the constant intersubjective "mapping" of the environment, the natural and social surroundings, and in this way it keeps the world clean and in order, so to say. That is, however, not a characteristic of the "primitive". The "obstinate murmuring of a language that speaks *on its own"* [Foucault 1961, p. VI: «Le murmure obstiné d'un langage qui parlerait *tout seul* – sans sujet parlant et sans interlocuteur»] is also, and especially, observed in highly civilized so-

cieties. Relentlessly, we speak without providing any information. This is apparent above all when we look at the media that streams redundancy more than 23 hours a day. One should not, however, disdain this murmuring, since we are indebted to it for the stability of our world. It is a specifically human means to supplement the structural performances of firmly solidified behavioural patterns, to replace them with semi-natural definitions on the linguistic level, to keep the language (and the related systems of symbols) alive in their function as a structural model of the world. The redundancies are refreshment routines as we have needed them for thousands of years, since the originally rigid biological programmes were supplemented or replaced by experience- and tradition-based rules that require constant reinforcement, repair, renovation. One can also ultimately include a significant portion of the literature that is described as schematic or trivial literature as part of this affirmative murmuring: language creation that tautologically reflects and reproduces the consensus on reality or the wish for reality.

3 The emeritive and second seriousness

Now it is possible to combine the general principle of the game and the special aspect of language and define language art more precisely. Its material is not a specific configuration of senses such as the sense of sight or sense of hearing, but rather its material is the entire world to the extent that it can be represented in language.

The game with language presumably belongs to the history of the human language from the beginning of time, since it is the most important means for learning to speak at all. In order to make a correct, individually mastered language by means of the innate language acquisition programme, there is only one method: learning and practising. This applies to all more important adaptations of higher animals. The bird practices flying, the wolf threatening and biting, the lion hunting. When these exercises are combined with pleasure ("intrinsically motivated"), we call them a game. The game, as one may define it, is originally an exercise and learning combined with pleasure (*cf.* Eibl 2009b for a more detailed explanation. *Cf.* in particular Tooby and Cosmides 2001 for the connection with the function and organisation mode and the meaning for literature). The pleasure in play, in turn, i.e. the pleasure in "wasting" energy that does not bring any direct benefits, is a biological adaptation especially of those species that must complete their innate skills in extensive contact with their surroundings.

So that such a game is possible at all, however, it is necessary to liberate our adaptations from serious problematic situations from time to time. Only satisfied individuals in protected spaces can play. These are e.g. infants, at least for certain periods of time. One hears them jabbering, i.e. they are learning and practising the use of their voice tools without it being possible to recognise something like semantics, let alone a relation to problems. The next, already communicative stage consists of "vocal games" (term from Papušek, Papušek and Harris in Oerter 1997, pp. 123) between mother/father and child, which begin at the age of two to four months: chains of sounds that are mutually repeated. Then ritualised, regular sequences follow (Goosey Goosey Gander; pain, pain, go away; giddy, giddy up, etc.), which are often already semanticised, but hardly refer seriously to something "outside".

More and more, then, a game with the linguistically coded world is made out of the game with language.

It opens the broad field of unliteral speech. It involves, however, by no means a peripheral area, but rather a use of language that stretches from the pragmatism of daily statements to the construction of religious and metaphysical terminological constructions. In a partially joking manner, I once tried to characterise this way of speaking as a grammatical mode, namely as the "emeritive" (Eibl 2004, pp. 343f.) in order to signal the broad scope of use. Put more precisely, it is a deep mood analogous to Fillmore's deep case (Fillmore 1968; Polenz 2008), i.e. it is a semantic role that can be described by different superficial phenomena, by the subjunctive, by a paradox, a metaphor, a quote, a mimetic or gestural commentary... The emeritive also makes it possible to speak about things that one – for various trivial and sublime reasons – cannot, may not or should not actually speak about at all, but which one wants to, should or must speak about nonetheless. One of the origins and functions of the emeritive is certainly joking speech and the ornamental flaunting of one's expressive abilities. Each joke that we tell, each point, each exaggeration in everyday speech, all gossip draws its appeal, if nothing else, from the skill that the speaker exhibits in the game of describing something differently.

But the emeritive also establishes something that one could describe as second seriousness. It facilitates protective and drastic rebuking, secret understanding, reflection about unsolved and possibly unsolvable problems in a safe space of quarantine or very briefly: Emeritive speech enables the speaker to address the unvoicable, ranging from the triviality of unmentionable body

parts and pieces of clothing to the unmentionable secrets of religion that can only be formulated as paradoxical limit signals.

4 Perspectives in research

The biological or evolutionary perspective leads a niche life in the study of literature. For this fundamentally unfortunate state, there are not only the usually automated prejudices against "scientific" or "reductionist" approaches (*cf.* Eibl 2007), but also thoroughly respectable causes. Precisely with regard to the biological aspect, the maintenance of tradition, the "cultural memory", is an important task. Without it, the human would be a bundle of heterogeneous and antagonistic instincts (*cf.* above on James) and not capable of surviving. It may be understandable if some colleagues block out potentially distracting factors. But self-reflection, of which the humanities are the standard bearers, should also permit the idea that the human finds himself in biological evolution.

Especially for studies of literature (the literary sciences), the focal points of current and future research can be named.

- Pleistocene subtexts: For two decades soon, there has been, primarily in the anglophone sphere, an academic literary movement that is called "Biopoetics" or "Literary Darwinism". The representatives of this school search for the biological factors, primarily on the level of the *represented*, in the behaviour of literary figures. In individual cases, this can contribute to the illumination of certain constellations, but the insights gained are limited if in this way, the entire world literature becomes a gallery of Stone Age men or even naked apes. Behind this, there is often a naive conception of reflection in the form of the Marxist or psychoanalytic interpretation that in literature – depending on the theoretical framework – the "real" relationships are being described in a veiled way, and we should discover or even expose them.
- Meaning generators from the Pleistocene: Categories, forms, dummies. The reception and construction of literary worlds is guided by old cognitive patterns and appeals to feelings. Such old mental dispositions are used as a framework in literature primarily because they are understood without special requirements. Love problems have a better opportunity to be understood everywhere than the problems of quantum physics. These fundamental dispositions include e.g. world view categories such as causality, teleology, induction (*cf.* Eibl 2010), logic. A similar meaning-generating effect is displayed by schemas for the order of events or for behaviour ("forms") such as that of reunification (*cf.* Eibl 2008) or detection, norm expectations such as those of interpersonal or even cosmic reciprocity ("justice" for humans and the heavens, *cf.* Eibl 2012), methods of stimulating emotional dispositions by dummy effects (*cf.* Mellmann 2002, 2006; Schwender 2006,), etc.. They define our expectations with regard to literary works; they justify in a new way the literary "forms" and are responsible for the "tension" with which we pursue, anticipate and construct the course of an action.
- Universals in history: The assumption of a general human nature and the experience of an immense diversity in human life and behaviour are a challenge for every ethological or historical issue. To date, the humanities have hardly addressed this, but rather are usually content with an intuitive everyday or perhaps popularised philosophical anthropology. For the representatives of the evolutionary biological perspective, the pleasure of re-identification can dull the awareness of the fact that large, culturally conditioned differences may exist between the emergence of an adaptation in the EEA (environment of evolutionary adaptedness) and the current application. Fundamentally, every biological adaptation has two time places. Besides the EEA, the current ECA (environment of cultural adaptedness) must also be considered at all times. The functions that the biological adaptation has in the one and the other may be identical, but they also may be fundamentally different.

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Shortly before the publication of this volume, our colleague Prof. Dr. Karl Eibl passed away. The chapter "Language Art" is part of his legacy – it builds bridges between disciplines.

Kurz vor Fertigstellung dieses Bandes verstarb unser Kollege Prof. Dr. Karl Eibl. Das Kapitel „Language Art" ist Teil seines Vermächtnisses – es schlägt Brücken zwischen den Disziplinen.