In the following short contribution firstly, with reference to the conceptions of Hegel and Arnold Gehlen, I will put the question of the language dependence of thinking, in order to make secondly visible consequences from this.

1. The language dependence of thinking

1.1 G.W.F. Hegel/ Wilhelm von Humboldt

Only with thinking, according to Hegel, the spirit begins. "Alone by this" it „differs essentially from nature" (10.25 add.¹). Nature, on the other hand, so Hegel, is first and

¹ References of this kind refer here and in the following to: Hegel, G.W.F., Werke, ed. E. Moldenhauer/ K.M. Michel, Frankfurt/M. 1969 ff, here especially vol. 10, p. 25; ‘add.’ refers to the inserted ‘additions’.
particularly characterized by *separateness*. Think of space and time which are separated into singular places and moments. In the organic world another perspective becomes visible: The organism already contains an *universal* dimension, namely the universal of the species (e.g. the flynesshood of the fly), but this still exists in the form of individuality. Only on the stage of the *spirit*, so Hegel, the universal is realized as *universal*: namely in the medium of thinking (9.538 add.). Only thinking is able to grasp the universal character of a thing, e.g. that it is a tree, not this singular tree, but a tree in general.

What however is thinking? Hegel gives an answer that does not seem so surprising, may be it seems rather trivial: "Thinking is to have thoughts" (10.283). But important is the addition, concerning "the rebinding of the thought to the word" (10.280 add.): "It is in names that we think" (10.278), in other words: The thinking is essentially depending on the *language*. Thus a conception becomes visible, which I will sketch briefly:

First, so Hegel, intelligence is like an "unconscious shaft in which that what is different not yet separately exists" (10.260), or with another picture: It is a continuously flowing stream of consciousness. Hence one cannot say that there are single, distinct ideas. There is rather an undiscovered continuity of the performance of the consciousness. Now ideas, so Hegel, result in that way that the imagination brings pictures to light from this shaft. At first this pictorial presenting has associative character. In this form it is no longer bound to the empirical context, but is detached from it and thus has subjective existence (10.266 add.). These subjective, pictorial ideas, in order to be objective, must now be linked to a *material* picture: That is a *symbol*. The strength of Jupiter, this is Hegels example, is symbolized for instance by an eagle, hence a very strong bird (10.269 add.). The mimetic character of the symbol is essential thereby. At the same time only by means of the symbol the subjective idea can gain objectivity.

A similar conception is presented by Wilhelm von Humboldt: "The intellectual activity, perfectly mental, perfectly inward, and passing without trace, becomes outward and perceptible for the senses by the tone in the speech, and receives a lasting body by the writing". And another statement of Humboldt: „Pictures, feelings, concepts, which join themselves a perception, ... can [by that perception] present themselves to the spirit at once, and do not run risk, to confuse themselves, because the one sound stitches them and holds them together".

Gaining increasingly objectivity and certainty, the imagining can finally do without the mimetic moment of the symbol and can objectivate itself in any sign (a sign which is produced by the subject itself). Thereby the sign, so Hegel, is like a "pyramid", as it were, "into which a strange soul is transferred and kept" – namely "its meaning" (10.270). Indeed the meaning is an *ideal* element which makes that the sign is no longer only a material state, but participates of the ideal sphere.

Now, a sign produced by the subject as a *sound* gains the function of a *name* for the idea. The name is a clearly outlined entity, and in this way the idea, too, appears as clearly outlined. Thereby it has become a single, distinct idea. Only by the name it gains

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4 Thereby it acquires “a being posited by the own (anthropological) naturalness of the intelligence” – for instance as a “tone” (10.271).
"a determinate [own] existence from itself", as Hegel says (10.270), and so it has become a thought. The other way round the idea can be retrieved from the name, which is produced by the subject itself by will, and thus it can be intended and become available as thought.\textsuperscript{5} Indeed: ‘Thinking is to have thoughts’, and ‘it is in names that we think’, with other words: By means of names it becomes possible to cut out discrete elements from the continuity of the consciousness stream and to outline them as single, distinct ideas, available to the subject, who can now operate with them. Thinking is operating with single, distinct thoughts, controlled over names. Thoughts do not lie already finished in the consciousness, in order to be imposed in addition then with names. Rather thoughts arise in this way that they are outlined and brought to existence only by means of names. The name is a necessary assistant, as it were, for the birth of a thought.

The outlined argumentation of Hegel makes clear the unquestionable language dependence of thinking. Only by language thoughts become possible as single, discrete ideas. \textit{Wilhelm v. Humboldt}'s famous dictum of the language as the "forming organ of the thought"\textsuperscript{6}, as a "necessary condition of thinking"\textsuperscript{7}, brings the dependence of thinking on language on a handy formula. Thereby language is not only the vehicle of thinking, but it is a constitutive condition of it. This quasi transcendental achievement of language has been comprehensively clarified by Christian Stetter, following Humboldt, Saussure and Wittgenstein.\textsuperscript{8}

As far as I see, Hegel's conception is congruent to a large extent with that of Humboldt. Who on whom is possibly dependent, must remain open here. In Hegel's oeuvre once only the writing on the Dualis (1828) is quoted, actually concerning the concept of grammar (10.272).

Humboldt himself argues on the line of Herder - here a well-known passage from Herder's 'treatise on the origin of the language' (1772): "But listen! The sheep bleats! Now a token tears oneself away by itself from the canvas of the color picture, where so little was to be differentiated, is deeply and clearly penetrated into the soul... Reason and language did jointly a timorous step, and nature met halfway – by the hearing. It did not only give an intonation to the token, but deeply brought it into the soul! It sounded! The soul made a grab – and suddenly it has a sounding word!".\textsuperscript{9} The bleating of the sheep cuts out, as it were, a piece of the continuous stream of consciousness. The soul gets entangled, grasps at it and keeps it as a word.

Please allow to bring in here a little episode concerning modern communication: I did not know where the just quoted text of Herder could be found. My student employees were looking for it in Herder's oeuvre for several days. Then I myself tried it with Google, you know this gigantic search engine for the internet. I only inserted the

\begin{itemize}
  \item \textsuperscript{5} Vgl. Christian Stetter: Schrift und Sprache. Frankfurt/M. 1997: Imagination "supplies the material to the logic which it needs for the business of 'judging': linguistically through-articulated material" (409).
  \item \textsuperscript{8} The word must be objectivated as a shape of a sign in order to attain the unity of the mind, to be an interpreted sign and as such can attain intersubjective validity (Christian Stetter, Schrift und Sprache. Frankfurt/M. 1997, 202; cf. esp. ch. 6, 10 f.
  \item \textsuperscript{9} Johann Gottfried Herder: Abhandlung über den Ursprung der Sprache (1772), 3. Abschn., I. Töne.
terms (in German) ‘language’, ‘origin’, ‘soul’, because I had a dim memory of these words. It took about seven minutes, then I had the quotation: So thinking does not only seem to be impossible without language, but also without google and the internet.

1.2 Arnold Gehlen

Less lyrically than Herder’s statement, but taking up Herder’s view Arnold Gehlen develops a language conception, which I would like just to outline, too. It represents an interesting completion of the Hegel-Humboldt view in an anthropological respect.\(^{10}\)

A surprising event, so Gehlen, produces an "emotional impact" and a corresponding "reaction pressure" (M 137). This demands an answer reaction from the individual. An instinct cannot stand in for this, since the instinct equipment of humans is strongly reduced. Thereby the individual is in an unclear situation, which Gehlen calls the situation of the "indefinite obligation" (M 137 ff): The event is understood in an indefinite way as an appeal to the individual. This appeal produces a meaning pressure in him. Now the pressure must be diminished by the execution of an action that can be neatly carried out. Which directly offers itself here, is a sound articulation. In addition, it can also be a ritual action, an artistic activity etc. Now following Gehlen the point is that this determinate behavior, which answers to the indefinite appeal in the situation of the indefinite obligation at the same time defines this situation. It takes over its situational content, thereby gaining an interpreting character and thus a meaning (U 137, 147). A sound expression e.g. in a hunger situation receives thereby the meaning content ‘hungry’.

The fact that the sound articulation gains a meaning dimension is interpreted by Gehlen more closely as a ‘relief phenomenon’, whereby the following is meant: If the possibility of the sound articulation is available, then it runs down automatically, i.e. it must no longer be controlled in all its phases. Thus the attention is relieved. It is not any more busy with the articulation, but can be directed toward other things. The released control energy can be made available "for more indirect and more free connections" (M 177). In this way "an intention on something, running in the language sound of the word", becomes possible, and just that is according to Gehlen a thought (M 234).

Gehlen compares this with drawing a given shape by hand. The visual check is relieved by learning. The drawing will increasingly become independent of the looking to the shape and can finally be carried out alone according to the imagination of it (M 136 f): The development of the language fantasy is parallel to the movement and shape fantasy. Accordingly their structures are characterized by Gehlen as "similar to language" (M 234, U § 11, 17, 29).

Then, on this stage, so Gehlen, an "inversion of the behavior direction" takes place (U 150), i.e. the "transition from automatic to intended actions". Willing presupposes thinking, namely as a "led, pre-sketched by fantasy carrying out of ‘actions’ (in the broadest sense)" (M 364). Only when it has become possible for me to anticipate the

action in the imagination I am able to intend this action. The animal behaviour is programmed by drives. Man’s action, on the other hand, is controlled by the will which for its part is made possible by an anticipation of the action by way of thinking. Indeed the specific human form of intentional willing presupposes thinking.

Thereby Gehlen’s interpretation of the genesis of the ‘inner world’ becomes understandable: It is not so that ‘ideas’, which are already available ‘inward’, are converted into speech acts and in such a way "find to the external world", but on the contrary on account of the mediation of language "the external world is growing into us" (M 345). Thinking, as it were, is something like an internal speaking, with Platon’s famous word the "talk of the soul with itself". But this inner dimension owes its existence to the real linguistic performance outside in the sensual world. This Gehlen-view corresponds to the stated Hegel-Humboldt conception, which here, however, is anthropologically grounded.

2. Consequences

In the following second section some consequences of this language conception are to be outlined, altogether twelve short points:

2.1 Distinct, determinate thoughts affort intention:

Only the word as discrete, sensual (phonetic or written) shape makes possible, as stated, distinct, determinate thoughts and thus – that is here the crucial point – operating with these; one could also say: juggling with thoughts, because thinking, as stated above, is a kind of a ‘trial run' in the fantasy. Only in such a way planning and intentionality become possible. Therefore it would be „ridiculous“, according to Hegel, „to regard the being bound of the thought to the word for a lack of the thought and for a misfortune" (10.280 Zus.).

2.2 There is a grasping of facts without language:

Accordingly thinking without language is impossible. Nevertheless there must yet be something like without language, because already animals must have the possibility of orientating themselves in their environment. By the way such a grasping of facts without language is already presupposed for the language formation itself - see for instance Herders comment that the formation of a word may be released by the hearing of the bleating of a sheep. Thus, following Herder, language formation already presupposes to be able to grasp sensual facts only by perception, and that means without language.

11 Platon, Theaitetos 189e–190a; Sophistês 263e–264b.
2.3 Why didn’t animals develop language?

If however animals are already able on the one hand to grasp facts and on the other hand to produce sounds: Why then did they not develop language? Here it can be answered with Gehlen that, due to their species-adequate equipment of instincts they do not come into the situation of the ‘indefinite obligation’. The animal instinctively reacts - in contrast to the instinct-reduced man: Thus the human individual gets into meaning pressure. In order to diminish it he must react with a determinate response behavior. Simplified to a formula: Only for an instinct-reduced organism in the evolution a selection pressure arose, which led to an increase of the capacity of articulation and brain and as a consequence to a development of language and thinking. (The fact that into this context belongs, too, the use of tools and the development of the precision motor activity of man qua prehensile hand is noticed only in the margin.)

2.4 Language can also express negative facts:

The word is a sound shape produced by man itself, which as such can be realized at will. Now that means that the idea associated with the word can be retrieved likewise at will and thus is detached of the empirical situation and is completely independent of it (Hegel 10.266 add.). By this, so Gehlen, also that can be linguistically expressed, which does not exist in reality. Only in such a way for instance "missing experiences", "negative impressions", "negations of facts" become linguistically expressible (U 143) - a circumstance of highest importance for thinking, since each determining is always a negating delimiting too, i.e. the statement that this just is this and not another thing. This is the meaning of the famous dictum of Spinoza: „determinatio negatio est“.

2.5 The meaning of an expression has universal character:

If real speaking is to be understood as a constitutive condition of thinking, this, however, does not prevent that the meaning of an expression has universal character. In fact, just by means of the word the concept, as seen, is independent of the empirical situation. Thereby it becomes a content arbitrarily reproducible and available for the subject, for instance ‘tree’. ‘Tree’ thus has the character of a norm, because it contains what it is to be a tree in general, independently of the contingent disposition of any empirical trees. Actually, as Gehlen rightly notices, a norm cannot be designed in the unforeseeably changing factual, but only by means of representation, here in particular in the form of linguistic representation (U 152). Thereby the language is the medium of the universal. As such it has, as Hegel says, the “divine nature”, which always turns that what is expressed into an universal (3.92). If I say ‘this tree’ I am speaking of all trees,

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12 Cf. Spinoza’s dictum ‘determinatio negatio est’ (see Vittorio Hösle: Hegels System. Der Idealismus der Subjektivität und das Problem der Intersubjektivität, 2 vol. Hamburg 1987, 195, ref. 74.)
because every tree is ‘this tree’ (that means under the linguistic aspect, i.e. as long as pragmatic aspects are ignored).

### 2.6 The inferential structure of meaning (Brandom):

Concepts of trees like ‘beech’, ‘birch’, ‘oak’ are universals. Comparing them makes visible a common to them: the superordinate universal ‘tree’,\(^\text{13}\) from which again can be turned over by inference to ‘plant’, ‘organism’, and so on. In general: The concept exists in the form of hierarchical inference structures. In this sense Robert B. Brandom has emphatically announced the “inferential view of the conceptual content”, which is thus essentially structured "by its relations to other terms".\(^\text{14}\) This is a direct (and by the way since two and a half thousand years well-known) consequence of the universal character of the meaning of concepts, which as such is hierarchically structured in the sense of more or less universal content. This, as Brandom points out, is a crucial point for thinking, too. So a parrot may say ‘Fred is coming in’ when Fred is coming in. But this is to be understood as a conditioned stimulus reaction, that means the parrot does not really understand the expressed words, because, so Brandom, the parrot would not be able to perform the inferential transition from ‘Fred’ to ‘man’ and further to ‘animal’, ‘organism’ and so on. Therefore it does not understand the meaning content of ‘Fred’ (vgl. Brandom 2001. 71, 90, 211, 248). Evidently this is also an important point concerning the project of artificial intelligence.

### 2.7 Failure of the extensional meaning theory:

For the reason of its universal character, the meaning of a concept cannot be interpreted as extensional, i.e. as the class of the objects, to which it refers. Corresponding attempts of the analytic philosophy\(^\text{15}\) have completely failed. The positivistic preference for the extension instead of the intension had only accepted as meaningful the instances of a concept, for example the meaning ‘tree’ was interpreted as the class of the trees. But this cannot be the meaning ‘tree’ because the real totality of the trees is not the same as ‘that which is common to all trees’, their universal, e.g. to be a plant or an organism - which by the way applies to fictional trees, too, to which no extension can be coordinated, however. Indeed the problem of fictional objects became the Waterloo of the extensional meaning theories in the analytic philosophy.

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\(^{13}\) To this cf. also Hegel 10.264, 264 f add., 265, 266 add.


\(^{15}\) To this in detail Wulf Kellerwessel: Referenztheorien in der analytischen Philosophie. Stuttgart-Bad Cannstatt 1995.
2.8 The use theory of meaning (Wittgenstein):

In view of the failure of the extensional theories the use theory of meaning offers itself as an alternative, going back to Wittgenstein’s ‘Philosophical Investigations’. Accordingly the meaning of a word is not understood as an inner, ungraspable thought; in the real use it rather gains an objective status. This conception withholds the ideal content of the word which sometimes has been interpreted as an inner intention. Wittgenstein on the contrary has denied such a subjective linguistic intention leading the word use. Ironically treating this he represents to a certain extent the linguistic counterpart of behaviouristic theories of action, which deny that an intention is essential for an action. However, John Searle, I think, was right in pointing out, that a behavior without action-leading intention cannot be called an action. Actually it were not the legs, which carried me here, but really my intention of speaking here with you. Now, an intention is also effective in the speech action. Wittgenstein, however, thinks about this as a bewitching of the understanding by traditional dogmas. But one should guard to take Wittgenstein’s experimental thinking for prophetic insight, for example his witty-polemic remark: „If one says: ‘how shall I know, what he means, I see only his signs’, so I say: ‘How shall he know, what he means, he has only his signs, too’“. No, so could be objected here: Above all he has also his speech intention, which does by no means need to be obvious to me as the listener.

2.9 Wittgenstein’s concept of the language game:

Nonetheless, the speech intention can be more or less obvious, for instance in the frame of teamwork or, with the Wittgenstein term: in the pragmatic context of a language game. Because all participants are linguistically familiar with each other everyone knows how the words are to be used and to be understood. Thus the idea of the language game is a necessary implement of the use theory of meaning. Otherwise it would not be tenable. Now the language game obviously is the paradigm of lifeworld communication - Wittgenstein’s examples are accordingly taken from this range of

\[\text{16} \quad \text{E.g. Searle, John R.: Geist, Hirn und Wissenschaft. Frankfurt/M. 1986, 56 ff.}
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\[\text{17} \quad \text{Wittgenstein, Ludwig: Philosophische Untersuchungen. Frankfurt/M. 1967 (I, 504).}
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\[\text{18} \quad \text{In the end this view leads to the much discussed Wittgenstein thesis of the impossibility of a private language. Stetter in his analysis has the argument sharpened in such a way: “The concept of a private language and a fortiori that of a private grammar are … not even conceivable without contradiction. For the object of knowledge and the medium of knowledge here indistinguishably coincide” (C. Stetter, Schrift und Sprache, 605). But that applies likewise to the logic, so that also a logical analysis of the logic would be ‘inconceivable’. However, I cannot join this view; to this cf. Wandschneider, Dieter: Ist das System der Fundamentallogik ohne das System der Fundamentallogik rekonstruierbar? in: Nagl. L./Langthaler, R. (ed.) System der Philosophie? Festgabe für Hans-Dieter Klein. Frankfurt/M. 2000. – Another argument: “The externality of the linguistic signs” makes possible “an intersubjective control of its use... and thus actually also its interpretation” (Stetter 623). This, due to the considerations stated in (2.6), does not seem quite convincing to me. – For the ‘private language thesis’ thereby naturally still nothing is decided. However, a detailed discussion must be renounced here.}
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\[\text{19} \quad \text{Cf. also: “Only you can know, whether you had the intention.’ That one could say to someone, if one explained to him the meaning of the word ‘intention’. It is called then: thus we use it” (Wittgenstein, Philosophische Untersuchungen I, 247).}
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pragmatically established life-performances as ‘building site’, ‘signpost’ etc. But already the analogy - by Christian Stetter rightly pointed out as the central competence of language (Stetter 1997, 98 f), - and all the more the metaphor, as the germ cell of the language formation, break the familiar self-evidence of the language game. And, last not least, where an essential thinking is intended, thinking habits must be given up. Even in this case of course we still make use of taken-over patterns of talking and thinking, but in ‘the center’ of the problem thinking, which deserves this name, operates reshuffling, revolutionizing, creatively. The intention of a therapy of philosophy by means of the naïve ‘normality’ of the normal language – as Wittgenstein suggests this “against the bewitchings of the understanding by the language”\textsuperscript{20}, - testifies in this respect a strange understanding of philosophy.\textsuperscript{21}

2.10 Performative contradiction in linguistic relativism:

Wittgenstein's thesis that we always play language games with a regional horizon of meaning, agrees with that well-known basic thesis of Humboldt that in ‘the differences of the human language’s building’\textsuperscript{22} different ‘world views’ are reflected\textsuperscript{23}, which is to be absolutely affirmed. But Wittgenstein goes further. He draws the conclusion that it would be absurd to consider such a thing like ‘the language’. In his view there are always specific language games. However, a statement like ‘Language is possible only in the form of a specific language game’,\textsuperscript{24} which in this form lays claim on universal validity, unfortunately contains a performative contradiction, that is a contradiction between the explicit content of the statement and what is implicitly presupposed by it at the same time. In the present case the formulated statement explicitly pretends that statements can only possess particular validity, because they are always statements in a specific language game. But then this also must be valid of that statement itself: Thereafter it cannot have universal validity. On the other hand: What it implicitly pretends is just universal validity, because ‘Language is possible only in the form of a specific language game’ is a statement concerning all sentences. The sentence explicitly denies universal validity of sentences and implicitly pretends universal validity at the

\textsuperscript{21} “Philosophical problems arise, when the language fetes” (Philosophische Untersuchungen I, 38). – “We reduce the words from their metaphysical use to their everyday use” (Philosophische Untersuchungen I, 116). – “The results of philosophy are the discovery of any simple nonsense and the dents, which the understanding got by the banging itself against the borders of the language. These, the dents, show us the value of that discovery” (Philosophische Untersuchungen I, 119).
\textsuperscript{22} Wilhelm von Humboldt: Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts (1836).
\textsuperscript{24} “One could object me: ‘You take it easy! You talk about all possible language games, however, you did nowhere say, what is essential for the the language game, and thus for the language. Which is common to all these actions and which turns them into language, or parts of the language’ ... And that is true. – Instead of explaining what is common to all we call language I say, there it is not one that is common to these features, although we use the same word for them all, - but they are related to each other in many different ways. And because of this relationship, or this relationships we call them all ‘languages’.” (Wittgenstein, Philosophische Untersuchungen I, 65).
same time: This is the noticed performative contradiction which makes the statement self-negating and hence untenable.

2.11 The concept of a transcendental language game (Apel) and the role of logic:

By this contradiction something of principle relevance becomes visible: The sensual element of language makes possible thinking and opens by that the entrance to a sphere, in which the sensual element for its part has no more function, a super-sensual sphere, as it were - the sphere of the logical. The language gives the thinking access to this sphere, which has its own laws. These are laws of universal character: They cannot be of particular validity, as the Wittgensteinian idea of the language game suggests, because such a claim would again lead to the quoted performative contradiction. Now in this sense Karl-Otto Apel\textsuperscript{25} introduces, "with Wittgenstein against Wittgenstein", as he says (348), the concept of a „transcendental language game“. It is understood not as one of the manifold specific language games, but rather as the system of "conditions of the possibility and validity of communication … already presupposed" by each specific language game (163, see also 329, 414). The transcendental language game contains that what is required in order to play any specific language game. With this "transcendental-hermeneutic concept of language", as Apel calls it (333), conditions of meaning and validity of argumentation are called in – and thereby logic. The language, is, as it were, ‘the chip’, with that, in the forms of thinking, the transcendental language game can be played, but according to the rules of logic. After all just explained this logic is to be understood as the fundamental logic, which as such possesses transcendental character. It must therefore not be confused with the different systems of formal logics, which are nothing else than constructions, constructed languages, which as such for their part already presuppose that transcendental logic.

2.12 Genesis and validity of thinking:

Finally summarized in a formula: Language is to be understood as the medium making possible thinking, but the laws of thinking do not stem from the language, but from that transcendental logic pointed out. A constitutive condition concerning thinking - in down-top direction, as it were – is the language. A constitutive condition concerning thinking - in top-down direction, as it were – is the logic. This is nothing else than the familiar opposition of genesis and validity: The language is constitutive for the genesis of thinking, the logic is constitutive for the validity of thinking. Only the language is the work of the subject, the logic, however, not. Accordingly the language is insensitive about the contradiction, the logic is not. So that fundamental transcendental logic must be understood as a trans-subjective realm of own laws, from which language and thinking, to be sure, can evade, but will never be able to escape.

\textsuperscript{25} Apel, Karl-Otto: Transformation der Philosophie II. Das Apriori der Kommunikationsgemeinschaft. Frankfurt/M. 1973; also in later publications.