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The intentionality of questions
– a critique of Searle's analysis of speech acts

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Abstract: Searle's analysis and classification of speech acts entails that one of the two components of a speech act is a proposition. The first part of the article demonstrates that the analysis and classification is misleading when applied to three authentic examples of questions embedded in an everyday activity. Considerations concerning the situations that give rise to the questions suggest that the discrepancy is due to assumptions about intentionality and perception implied by the proposition-based analysis and classification of speech acts. In the second part of the article, Searle's theory of intentionality and perception is compared with cognitive ethnographic observations of the situations that give rise to the three questions. The comparison shows that Searle's theory of intentionality and perception is insufficiently informative and partly misleading as regards human intentionality and perception in the performance of an everyday activity. The claim is that the assumptions about intentionality and perception that form the basis of the proposition-based analysis and classification of speech acts are insufficient as a basis for a general theory of speech acts.

Keywords: speech acts, classification, questions, intentionality, perception, cognitive ethnography

1. An adequate basis for a general theory of speech acts: purpose and outline

In this article, I will identify and discuss a problem in speech act theory. The problem appears when Searle's analysis of the general form of speech acts, F(p), is applied to everyday language use. Searle's analysis implies that one of the two components of a simple speech act is a proposition, but many speech acts do not contain a proposition. This discrepancy is, of course, recognized by Searle, but it is treated as a semantic detail that poses no challenge to the

analysis of the general form. However, if one considers what the proposition-based analysis entails concerning the speech situation, it appears that the discrepancy reflects a far more comprehensive and fundamental problem that has something to do with our relation to the world as humans, more specifically with what we direct our attention to in the environment, what we perceive, and how we perceive. Hence, the primary aim of this article is to raise awareness of what the proposition-based analysis of speech acts entails concerning our relation to the world in terms of intentionality and perception. The claim is that the assumptions about intentionality and perception that form the basis of Searle's proposition-based analysis of speech acts are inadequate as a basis for a general theory of speech acts, and that an informative and accurate analysis of certain types of commonly used speech acts requires an alternative basis.

The idea that speech acts include a proposition is found in a wide range of linguistic descriptions, characteristics, classifications, and typologies, both of speech acts in general and of specific classes of speech acts. The reason for choosing Searle's theory as the subject of scrutiny is that the analysis, F(p), originates in Searle's (1969) theory of speech acts, that the theory has been pervasive, that it is explicit and quite precise with regard to the function of the proposition in a speech act, and finally that it is, in fact, based on a theory of intentionality and perception. Thus, the criticism here is directed at Searle's analysis. However, the fact that the proposition-based analysis is widely shared suggests that this criticism of Searle's analysis may be relevant to all of the descriptions of everyday language use that assume that the proposition is a component of speech acts in general – indeed to any direct and unreflected use of the term 'proposition' in the analysis of everyday language use.

The basis for the identification of the problem can be found in three authentic examples of questions forming part of an activity of everyday life. The examples derive from a cognitive ethnographic (Hutchins 1995) study with particular regard to the socio-cognitive tasks (Harder 2010) that language fulfills (Borchmann 2019, 2018, 2016). The advantage of this method with regard to the issues of intentionality and perception is that it provides access to ample information concerning the language users' knowledge and skills, the practical and cognitive tasks (Cook 1994, Vicente and Rasmussen 1992, Roth and Woods 1989, Rasmussen 1985) that the language users are confronted with and need to solve, the non-linguistic behavior that accompanies the linguistic behavior and serves as criteria for the understanding of the linguistic behavior (Wittgenstein 2009/1953), the goals and values (Hodges 2007, Hodges and Baron 1992) that guide the activity that the speech acts are part of, and the lawful constraints that set the boundary conditions on the space of possibilities (Flach and Rasmussen 2000, Rasmussen et al 1993).

First, I will outline Searle's analysis and classification of speech acts. Next, I will show that Searle's analysis and classification are misleading when applied to three simple, ordinary speech acts in everyday language use. In section

4, I will consider the origin of the discrepancy between Searle's analysis and the speech acts, starting with the situations in which the speech acts arise. These considerations point to Searle's assumptions about the cognitive basis of speech acts, i.e. the understanding of the world that motivates and guides the use of language. In Section 5, Searle's theory of intentionality and perception is outlined, and then, in section 6, I will show that some of the assumptions that characterize Searle's theory of intentionality and perception are in conflict with what one can observe in the situations that give rise to the three speech acts investigated. In section 7, I will compare the aforementioned situations with the situation that Searle's theory derives from and explain the discrepancy by pointing out that the subject of Searle's theory is intentionality and perception in an idle state whereas the subject of the observations of everyday life is intentionality and perception in operation. Following that line of thought, I will consider two internal discrepancies in Searle's presentation of the theory of intentionality and perception. Section 8 comprises some final considerations and a conclusion.

2. Searle's analysis and classification of speech acts

2.1. The analysis of speech acts

Searle's theory implies that speech acts can be analyzed in two components. The analysis is represented using the following symbolism, where F and p represent each of the two components (Searle 2010:7, 1996/1979:1, 1996/1969:31):

F(p)

p stands for propositional content. In "the simple cases", the propositional content is a combination of a reference, e.g. *Sam*, and a predicating expression, e.g. *smoke* (Searle 1996/1969:33). However, Searle considers other semantic structures to be p's, e.g. thetic structures like *it rains*. The reason is that the criterion of p is not the structure, but the function. The initial definition of the function of p is that it "raises the question of truth" (Searle 1996/1969:126). The combination of a reference to Sam and the predicating expression *smoke*, for example, raises the question of truth of *smoke* of Sam. The central point is that the combination only raises the question of truth; it does not provide any indication of the speaker's commitment with regard to the truth. This function is later described in terms of 'conditions of satisfaction' (Searle 1996/1979:126-131). Conditions of satisfaction involve a more general notion than the notion of truth conditions. But as regards the function of the propositional content, it is basically the same, that is, to determine the conditions the world must meet if p is to be true or – as Searle prefers – satisfied. The conditions of satisfaction of the speech act *Sam smokes*, thus, are that Sam smokes. Searle's concept of conditions of satisfaction is applied to propositions that form a part of speech acts and is designed to cope with the fact that a proposition in a

speech act may be related to the world in more ways than the way we describe with the distinction true/false. A proposition that forms part of a speech act can, for example, be related to the world in such a way that the speaker wants the world to be changed so that it matches the proposition, e.g.: *Sam, smoke!*. The conditions of satisfaction of this speech act are that Sam obeys the order and smokes. Certainly, one of the preparatory conditions of this speech act is that the proposition is false at the time of speech, but in a theory of everyday language use, this is not a sufficiently informative characterization of the relation between the proposition and the world. It is relations like these that the concept of conditions of satisfaction should be able to accommodate. Thus, p's function in a speech act is to determine the conditions the world must meet if the speech act is to be satisfied.

F stands for illocutionary force indicating device and indicates the illocutionary force of the speech act. The initial definition of the function of F is that it "shows how the proposition is to be taken" (Searle 1996/1969:30). In Searle (1996/1979) this function is accounted for based on the terminology of 'direction of fit' invented by Austin (2019/1953). However, Searle refers to Anscombe's (1957) illustration of the distinction, and as Humberstone (1992) notes, this is quite different from Austin's. In Searle's account, direction of fit covers the possible ways in which a representation of a state of affairs can be related to the world (Searle 1996/1983:7-13, 1996/1979:3-4). The starting point is that p – in so far as it determines the conditions the world must meet - is a representation of a state of affairs, and, therefore, can match or not match the world. The symbolism F(p) indicates that F operates on p (Searle 1996/1969:122) and that the meaning of a speech act is p as a function of F. F operates on p by relating p to the world. The concept of direction of fit implies that F can relate p to the world in basically two ways: either F indicates that p matches the world, or F indicates that the world changes so that it matches p. The former relation is called word to world direction of fit, the latter world to word direction of fit. One can then distinguish between more specific world to word relations, also called illocutionary points (Searle 1999:151, 1996/1979: 3). One subtype of the world to word relation is speaker-based and implies that the speaker must change the world so that it matches p. Another subtype is hearer-based and implies that the hearer must change the world so that it matches p (Searle 1999:151). The analysis can be illustrated by examples that include the same proposition in different directions of fit (revised version of Searle 1996/1969:22):

(1) Sam smokes
(2) Sam, smoke!
(3) I, Sam, promise to smoke

These three speech acts include the same reference and the same predicating expression in the same relation of predication. The difference is that in (1) F indicates that p matches the world. In (2) F indicates that the hearer must change the world so that it matches p. In (3) F indicates that the speaker will change the world so that it matches p.

A crucial point in the theory of speech acts is that the proposition is not the minimal unit of linguistic communication (Searle 2001/1965:80,85). In line with this, Searle presents his analysis in strong opposition to traditional semantic descriptions that assume that the proposition is the minimal unit of linguistic meaning. But the analysis is nevertheless based on the assumption that one of the two basic components of a simple speech act is a proposition. Searle does acknowledge that the propositional content of some speech acts is not a complete proposition and mentions exclamations such as *Hurrah* and questions such as *How many people were at the party* (Searle 1996/1969:30-31). Likewise, Searle notes that speech acts such as greetings have no propositional content (Searle 1996/1969:67). But these observations have no implications for the analysis of the general form; this analysis closely follows the simple case which, according to Searle, involves reference to a single object and the predication of simple expressions, and thus, a proposition. Accordingly, Searle presupposes that p is a proposition in the initial definition of the function of F (see above) and refers to propositions as "entire propositional contents" (Searle 2015:34). Furthermore, it is precisely the proposition's function as a specification of conditions of satisfaction in the sense of a representation of a state of affairs that forms the basis for the classification of speech acts.

2.2. Searle's classification of speech acts

Searle distinguishes between classes of speech acts based on the indicated relation between p and the world. The two basic directions of fit, word to world and world to word, form the basis of four classes. There are assertives, i.e. F indicates that p matches the world, e.g. (1), directives, i.e. F indicates that the hearer must change the world so that it matches p, e.g. (2), commissives, i.e. F indicates that the speaker will change the world so that it matches p, e.g. (3), and declarations. Declarations are characterized by a double direction of fit, i.e. F implies that the world is changed so that it matches p in that F indicates that p matches the world, e.g. the chairperson of the meeting says *The meeting is adjourned*. A special kind of direction of fit is added, which, allegedly, consists of not having a relation to the world. This relation is called null and implies that the speaker associates an emotion with p and presupposes that p is true, e.g.: *Cool that Sam smokes*. Speech acts with null direction of fit are called expressives.

In section 3, the analysis and classification will be applied to three questions. The consequence of Searle's classification is that questions are a subclass of directives (Searle 1996/1979:14, 1996/1969:69). The basis of this classification

is that they are attempts by the speaker to get the hearer to do something. According to the classification, directives are characterized by a hearer-based world to word direction of fit, that is: "The propositional content is always that the hearer H does some future action A" (Searle 1996/1979:14). In Searle (1999), the illocutionary point of directives is described as: "to get the hearer to behave in such a way as to make his behavior match the proposition" (Searle 1999:149). Thus, if we take the proposition-based analysis and classification of speech acts at its word, it means that a question is an attempt to get the hearer to behave in such a way as to make his behavior match the proposition.

3. Questions in everyday life

Searle (1999, 1996/1979, 1996/1969, 2001/1965) does not provide a thorough semantic and pragmatic analysis of questions (see Mortensen 2020, this issue, Nielsen 2020, this issue, for discussions).[2] All in all, he does not pay much attention to them. However, if you apply the analysis and the associated classification to a small set of authentic examples of questions, substantial problems arise. Examples (4), (5), and (6) below are authentic examples of ordinary, simple speech acts performed by humans in the pursuit of a daily life activity. The speech acts differ with regard to their semantic structure, and thereby they enable a nuanced examination of the proposition-based analysis and classification.

(4) hvad er skybasen (Pilot on the ground to pilot in the air, Hammer Airfield 2018)
'what is the cloud base'
(5) hvem betalte (Pilot student to air field attendant, True Airfield 2017)
'who paid'
(6) er du fastspændt (Pilot student to gliding instructor, True Airfield 2017)
'are you buckled up'

In section 4 and 6, I will present analyses of (4), (5), and (6)[3] that involve the speakers' knowledge and abilities, the practical and cognitive tasks they are confronted with, as well as other relevant conditions that apply in the situations in which the speech acts arise. The following analyses are limited to the semantic structure with the objective of comparing an analysis of the structures with Searle's analysis and direction of fit-based classification.

The semantic content of (4) is not a proposition. It is incomplete both as a predication (Strawson 1974, Searle 1996/1969) and as a specification (Borchmann 2018). As a predication, the content is incomplete, since (4) does not include a predicating expression. As a specification, (4) is incomplete, since it does not include an indication of the state of the identified variation the cloud base. One might argue that the speaker's use of the pronoun *hvad* 'what'

presupposes that the cloud base is something. But first of all, this presupposition is trivial and irrelevant. It is not part of the information communicated, but a prerequisite for the communication. Secondly, presuppositions imply a direction of fit that is contrary to Searle's characterization of directives. Presupposed propositions are assumed to match the world and, hence, have a word to world direction of fit – and it would be pointless to say that the illocutionary point of (4) is that the listener[4] must change the world so that the cloud base is something when the speaker presupposes that it is something. Indeed, saying that the listener must change the world so that the cloud base is something is a category mistake. Finally, the presupposition 'the cloudbase is something' is incomplete as a specification of conditions of satisfactions. (4), thus, does not include a proposition, and therefore, the content of (4) cannot be assigned to a direction of fit.

Referentially, (4) is characterized by the fact that the speaker, by means of the expression *skybasen* 'the cloud base', identifies a variation in the environment. A variation is a limited set of mutually exclusive possible states, the current state of which is constantly changing within certain constraints (Borchmann 2018). Examples of variations are the wind direction, the wind speed, the speed of your car, the distance to the car in front of you, the presence of vehicles coming from behind, the temperature of your coffee, the price of petrol, the exchange rate, and the time of day. (4) can then be said to differ from a specification in that there is no indication of the state of the variation (Borchmann 2018). Instead, the pronoun *hvad* 'what' indicates that the state of the identified variation is undetermined, and as a fundament (Hansen & Heltoft 2011), i.e. first position in a verb-second clause, the pronoun serves as an F indicating that the speaker is asking for an indication of the state of the variation. If we try to apply the term direction of fit to this relation by saying that the listener must make the world match the content by indicating the state of the variation, we use the term 'fit' to refer to a relation that differs from the one Searle refers to in the characterisation of directives and elsewhere. The listener should not do anything to make the world match the propositional content. What the listener must do is to indicate the state of the variation that the speaker identifies. Thus, using the term fit to refer to this relation implies a semantic drift from denoting a relation between a proposition and the world, to denoting a relation between an identification of a variation and an indication of the state of the variation. This relation is not a relation of match between a proposition and the world. Pragmatically, it is an interactional relation between two speech acts: a request and a response. Semantically, it is a relation of exclusion: the speaker identifies a set of possible states, and the listener indicates a state and thereby excludes all the other possible states.

(5) can be described semantically as an open proposition, or, with Searle's notion, as a propositional function (Searle 1996/1969:31). It includes a predicating expression, but instead of a reference to a referent that fulfills the

role 'agent' specified by the predicating expression *betale* 'pay', the speaker uses the pronoun *hvem* 'who', indicating an undetermined variable. This implies that the determination of the conditions of satisfaction is incomplete, and therefore the content of (5) cannot be assigned to a direction of fit. In other words, the term open proposition is not a solution to the problem, but the name of the problem. Again, one can argue that the speaker presupposes that someone paid. But this presupposition is obvious and part of the meaning of the verb *betale* 'pay' at the semantic level of frames, and as such it is a prerequisite for the communication rather than a part of the information communicated. Surely, it makes no sense to say that the speaker wants the listener to change the world so that it matches the open proposition '*x* paid'. If we try to adapt Searle's fit-based functional characteristics to the example by saying that the listener must make the world match the propositional content by completing the proposition, i.e. providing the reference that determines the undetermined variable, we use the term 'fit' in a way that differs from the way Searle uses it elsewhere: What must be changed to match the content is not the world. Thus, the listener should not pay anyone anything. The listener must perform a speech act that provides the speaker with the complement to the propositional function. This is not a relation between the world and a proposition. The use of the term 'fit' for this relation implies a drift from one dimension of the communication, namely what the utterance is about, to another dimension of the communication, namely the interaction. Again, this relation is not a relation of match between the world and a proposition. Pragmatically, it is an interactional relation between a request for information and a response. Semantically, it is a relation between a variable and an expression that binds the variable.

That is, as regards speech acts that do not include a proposition, the analysis and the related direction of fit-based classification are misleading. But, in fact, there is also a problem with questions that include a proposition. According to Searle's analysis of the "simple case", (6) can be said to include a proposition. Thus, the verb *fastspændt* 'buckled up' can be considered a predicating expression, and the speaker's use of the deictic pronoun *du* 'you' is a reference to the listener. However, the point of the speech act is not that the listener should change the world so it matches the proposition. The listener should not buckle himself up. The term *fastspændt* 'buckled up' indicates one of two possible states that the back-seat harness system may be in, fastened or released, and the listener must confirm (or disconfirm) that the system is in the fastened state. Again, the application of Searle's direction of fit-based functional characteristics to such examples implies a drift from what the speech act is about to the linguistic interaction: fit is no longer a relation between the world and a proposition. Instead, it is the illocutionary force indicating device that indicates what the listener must do, and what the listener must do is not to change world so that it matches the proposition, but to perform

a speech act that completes the interaction as indicated by the illocutionary force indicating device and constrained by the verbal *fastspændt* 'buckled up'.

To sum up, if we apply Searle's direction of fit-based description of directives to questions, it results in several different meanings of the notion 'world to word direction of fit':

a) Sam, smoke!: world to word = to change the world so that it matches the proposition
b) what is the cloud base: world to word = to indicate the state of a variation identified by the speaker
c) who paid: world to word = to identify the referent that fulfills the role that the speaker specifies
d) are you buckled up: world to word = to confirm the state of a variation indicated by the speaker

b, c, and d do not conform to the way the concept direction of fit is defined by Searle and illustrated by Anscombe's example. It is true that in some pragmatic descriptions, the term 'fit' is used to refer to the relation between a speech act and a (rhetorical) situation (Bitzer 1992), and in ecological psychology, perception of an affordance 'fit', i.e. a relation between an action and a possibility for action offered by the environment, is a major principle of selection and learning (Gibson 2000), but this is not how Searle uses the term. If we extend the concept to include relations like b, c, and d, we are left with an extremely vague, eclectic notion of fit. We cannot base an informative analysis and classification of speech acts on such vagueness.

Within philosophy of language and linguistics it is not an unusual strategy to circumvent the problems of such discrepancies between a postulated semantic structure and the linguistic material analyzed by altering the material and then claiming that the result of the alteration is what the language user, in effect, is saying. Within linguistics, there is even a name for the subject of such alterations. Thus, by classifying the material as an 'ellipsis', the analyst is allowed to add words to the material so that it corresponds to a postulated structure. The strategy is based on the idea that the speaker's psychological point of departure is a mental representation that corresponds to the postulated structure, and that the missing parts of the representation are omitted only in the articulation. In the case of (5), the analyst might, for example, alter the authentic utterance *hvem betalte* 'who paid' to *sig mig hvem der betalte* 'tell me who paid' (see, for example, Searle 1996/1969:69). Needless to say, I am embarrassed on behalf of language sciences when I encounter such manipulations. Because the limitations of the strategy in relation to a scientific description of language and language use are obvious. First of all, you cannot claim that what you describe is language or language use. What you are doing is projecting a counterfactual ideal – what the speaker should

have said according to a hypostatized norm. As if it took a logician to show people at last what a proper sentence looks like (Wittgenstein 2009/1953:43). Secondly, the description cannot be falsified empirically. It is self-affirming and immune to observations. These are general scientific problems with this strategy. But when the strategy of ellipsis is applied to questions, it does not even solve the problem. As can be illustrated by the alteration of (5) to *sig mig hvem der betalte* 'tell me who paid', the alteration reproduces the flaw as regards the assumed function of the propositional content in directives: the variable *who* is still not bound. Hence, p is not a complete specification of how the hearer should behave to make his behavior match p; this would require a name of the payer. Here, it becomes clear that it is the very idea of a proposition that is problematic in the description of questions. The proposition is, by definition, a specification of conditions of satisfaction in the sense of a complete representation of a state of affairs. However, the psychological point of departure for the articulation of questions like (4) and (5) is precisely an inadequate specification, and this is reflected in the semantics of the questions by variables like *hvad* 'what' or *hvem* 'who'. Long story short: regardless of the way we approach the analysis and classification of the function of speech acts, it is a mistake to ignore the particular words and semantic structures that characterize them.

Searle's distinction between F and p is an important contribution to the analysis of speech acts, and the assumption that p specifies the conditions of satisfaction and that F indicates the relation between p and the world, holds remarkably well in the case of assertions and promises. But it does not hold in general. It should also be noted that Searle (1969:66-67) in describing different types of illocutionary acts actually formulates rules that are informative and accurate when applied to speech acts such as (4), (5), and (6). These rules, on the other hand, are incompatible with the analysis of the general form and the direction of fit based characteristics of the class of directives. That is, the above application of Searle's analysis and classification to three simple, ordinary speech acts results in discrepancies, and the conclusion is clear: Searle's analysis and classification of speech acts is misleading as regards questions.

4. Considerations on the situations in which the speech acts occur

As I have framed the comparison above, one can immediately pinpoint the cause of the discrepancies, namely the assumption that a simple speech act includes a proposition and an indication of the proposition's relation to the world. This implies that the psychological basis of language production is a proposition in some kind of relation to the world. That is, as the speaker opens the mouth, he or she has a mental content that is complete in the sense that it can be converted into a propositional format and, thus, assigned to a truth value. The problem with this assumption when applied to everyday language use is that we often speak and write based on understandings of the world that are insufficient relative to the solution of the practical task we are confronted

with. And most importantly, we are speaking and writing precisely to remedy this deficiency. This basic condition can be illustrated by the situations of (4), (5), and (6) as they are paradigmatic examples of such conditions. (4) is performed by a glider pilot on the ground who has to decide whether he should take off now or wait until later. One of the decision factors is the cloud base, i.e. the distance between the terrain and the underside of the clouds. If it is low, e.g. 700 meters, the pilot will wait to start on the assumption that it will rise within the next hour. If it has a suitable height, e.g. 900 meters, he will start now. The speaker has, in fact, immediate access to the information he requests. Thus, if he raises his head, he can see the distance between the terrain and the underside of the clouds, and, indeed, the speaker raises his head and looks toward the sky several times prior to (4) in order to determine the cloud base.

Figure 1. The cloud base relative to the speaker's visual attention in situation (4)

However, the speaker cannot differentiate the height with sufficient precision to make a decision. The precision required is beyond the speaker's perceptual ability. Thus, the speaker's perception is insufficient in relation to the solution of the cognitive task he is confronted with. Therefore, he radios the pilots of a glider that took off a little while ago and that he can see is close to the cloud base and asks them what the cloud base is.[5] The pilots of this glider can look at their altimeter, and because they are close to the cloud base, they can estimate the vertical distance to it with reasonable accuracy and add the estimate to the value indicated by the altimeter. That is, (4) is an act to rectify a deficiency in the speaker's understanding of the world.

(5) is uttered by a student glider pilot who has just received a sandwich. He now wishes to pay for the sandwich. He knows there have been two other students at the bakery to buy sandwiches, and that one of them has paid, but he doesn't know which one, and therefore he doesn't know who to pay. Hence, he lacks information relative to the selection of an action he must perform. The current deficiency is due to the fact that the event that provides the basis for obtaining the necessary information, precedes the situation in which the speaker finds himself, and that the speaker was not

present at the event. Therefore, he performs a speech act in order to obtain the necessary information. In the current situation, none of the people who were at the bakery are there with him, so the speaker then asks a person whom he presumes has spoken to those who were present at the event and thereby obtained the necessary information.

(6) is performed by a student glider pilot who is about to take off in a two-seater with an instructor in the back seat. The training involves that the student behaves as if she were the commander. Before a commander takes off with a passenger, he or she must ensure that the passenger's harness is fastened. However, the student sits in front of the passenger and cannot see the passenger's harness.

Figure 2. The speaker's perspective in situation (6)

Therefore, as part of a preflight procedure, the student asks the instructor if he is buckled up.

In all three cases, the starting point for the language use is an insufficiency in the understanding of the world. The current deficiencies are due to various conditions. In situation (4), the speaker's ability to differentiate is not good enough relative to the precision that his decision requires. In situation (5), the speaker is separated in time and place from the event that includes the information the speaker needs. In situation (6), the speaker has indirect access to the information required. She can open the hood, release her harness, get out of the airplane, turn around and face the passenger in the back seat and check for herself whether the passenger's harness is fastened. But this would be time-consuming and resource intensive, and, hence, inconvenient. What is common to the three deficiencies is that they can be corrected by the use of language. The examples, thus, illustrate how unique and fantastic a tool language is. In situation (4), the speaker can use language to acquire information that exceeds his perceptual ability. The use of language in this situation even contributes to the perceptual ability of the speaker, since the speaker can compare the more precise answer with his own perception. In situation (5), the speaker can simply transcend time and place by using language; by asking, he can get information about a past event that took place miles away from him. In situation (6), the speaker can solve a cognitive problem quickly and efficiently with minimal energy exertion by means of language. The examples, thus, show how language complements and expands our perceptual system, and,

hence, also the evolutionary edge that language provides: language is a socio-cognitive system that enhances our possibilities for coordination of attention and action enormously and thereby our possibilities for sharing information, cooperating and learning (Tomasello 2008, Deacon 1997). The crucial point in relation to the semantic analysis of questions is that deficiencies in our understanding of the world are not only the psychological starting point for language production, they are also the motive for language production. It is therefore plausible that deficiencies in our understanding of the world are one of the driving forces in the development of language. To put it another way, questions tell us something fundamental about our species' relation to the world, and if we want to base a description of language on a theory about that relation, it is fatal to ignore this.

The above analyses of the situations in which these speech acts occur indicate that the problem that arises when the proposition-based analysis and classification is applied to everyday language use is not merely a semantic problem. It arises, so to speak, prior to the language use and has something to do with the cognitive basis of language use. What is it that we direct our attention to in the environment, what is it we perceive, and why and how do we do it? For that reason, the second part of this article is about intentionality and perception. Taking a starting point in an account of the theory of intentionality and perception that provides the basis for the analysis and classification of speech acts presented in the first part of the article, I will argue that the problem is comprehensive and fundamental.

5. Searle's theory of intentionality and perception

The basis for the assumption that the proposition is a fundamental component of a speech act is explicit in Searle's philosophy. Thus, Searle's theory of speech acts is based on a theory of intentionality (Searle 2010, 1996/1983) and a theory of perception (Searle 2015). As the theory of perception is an extension of the theory of intentionality, I will deal with them jointly. Searle considers the philosophy of language to be a branch of the philosophy of mind, understood as a study of the capacities of the mind to relate the organism to the world, and whereas the theory of speech acts (1996/1969) was proposed before the theory of intentionality, Searle characterizes the theory of intentionality as a foundation for the theory of speech acts (Searle1996/1983:vii). The relation between language and intentionality is described, as closely as possible, as the following: "The limits of meaning are the limits of intentionality, and it is a consequence of our analysis of intentionality that there is a limited number of things you can do with language" (Searle 1999:151). I believe that this is the right way to approach the relation between language, humans, and the world. The starting point of the study that has given rise to some of the observations presented here is that a theory of language must be founded on a theory of our relation to the world as a species, including a theory of intentionality and

perception. However, my claim is that the problem we have encountered in the analysis and classification of questions is contingent on and can be located to specific assumptions of intentionality and perception that characterize Searle's theory. More precisely, my claim is that the observed discrepancies are a consequence of misleading assumptions about what our attention is directed at in the environment, what we perceive, and how we do it. The main purpose of this article is to raise awareness of the inadequacies of these assumptions and thereby pave the way for informative and accurate analyses and classifications of questions and other speech acts. In this section, I will present the key assumptions in Searles theory of intentionality and perception.

Searle presents his theory of perception in opposition to theories characterized by the assumption that perception is not direct, but mediated by representations of the world, be it conceptual structures, categories, impressions, sense data, propositions, or the like. This assumption has been dominant in Western philosophy since Descartes and has led to a number of philosophical problems, including skepticism and the mind-body problem. Searle proposes to solve these problems by simply abandoning the assumption of indirect perception. Thus, Searle's theory implies that we have direct access to the world, i.e. that we do not have to perceive anything before we perceive something in the world. I share this assumption. So, what is crucial in the current discussion of the basis of an analysis and classification of questions is not *whether* we perceive directly. What is crucial is *what* we perceive directly.

Searle's theory of perception is based on a theory of intentionality. Perception is considered a form of intentionality. Intentionality is that feature of the mind by which it is "directed at or about or of object and states of affairs in the world" (Searle 2015, 1999, 1996/1983). This concept of intention must not be confused with intention in the sense of intending. Intending is just one of the ways in which our mind is directed at something or is about something in the world. A motorist on a highway may intend to change lanes, but the motorist may also hate to change lanes, hope to change lanes and see that another motorist is changing lanes. All these relations between the driver's mind and a lane change are examples of intentionality according to the above concept of intention. A theory of intentionality is fundamental to a theory of language use because it covers the aboutness aspect, i.e. the fact that when we talk, we talk about something. Virtually all analyses of a linguistically conveyed unit of information are based on an assumption of aboutness. That goes for the reference-predicate analysis and the topic-comment analysis. That is, when a theory of language use is based on a theory of intentionality, speaking/writing and listening to/reading about something is considered to be a more specific case of directing one's attention to something.

According to Searle (2015), intentionality is a biological phenomenon. As a biological phenomenon, intentionality can be regarded as a result of evolution and thus something that provides an edge in the niches of humans and animals.

As the biologically primitive forms of intentionality, Searle mentions conscious perception, intentional action, hunger, thirst, and such emotions as anger, lust, and fear. Belief, desire, and hope, on the other hand, are derivative (Searle 2015:33). The general term for all these forms of intentionality is 'intentional state'. The central assumption in Searle's theory of perception is that one can distinguish between intentional states, on the one hand, and what we perceive, on the other. Intentional states are our experiences of what we perceive, and they are ontologically subjective, i.e. they exist only as experienced by a human or an animal subject. What we perceive, on the other hand, is ontologically objective, i.e. it exists independent of any experience. According to Searle, what we direct our mind to and perceive directly are objects and states of affairs. Objects and states of affairs are not defined, but they are characterized as something that, unlike experience, has a "more or less permanent existence" (Searle 2015:67). Furthermore, they are something that can satisfy an intentional state, in other words, they are facts. Examples of objects include a computer screen, books, papers, a table, a chair, and a dog; examples of states of affairs include that a blue book is on top of a brown table and that it is raining. The basis for this – somewhat unreflective – assumption of what we perceive directly is something we will return to in Section 7. The theory of perception must solve the epistemological problems associated with the assumption that what we perceive, is merely an ontological subjective representation of the ontological objective. Searle deals with this by distinguishing between intentional states with objects and intentional states without objects. The intentional states that characterize perception are of the first type. For these states, it holds that they are causally dependent on their object. And the theory implies that awareness of this causal relationship is intrinsic to the intentional state. This property of intentional states is called causal self-reflexivity (Searle 2015:58). States without objects, on the other hand, are not causally conditioned by objects, but have internal causes (Searle 2015:19). Against this background a distinction is made between representations and presentations. Searle writes: "When I think about something, my thoughts are representations of whatever it is that I am thinking about. But when I directly perceive it - when, for example, I see it - then my visual experiences are actual presentations of the object and state of affairs seen" (Searle 2015:41). Presentation is a subspecies of representation (Searle 2015:75) that differs from other representations by being causal self-reflexive.

Whereas intentional states differ as regards causal self-reflexivity, Searle nonetheless assumes that they have the same structure. Thus, every intentional state consists of a content and a psychological mode (Searle 2015:33). Content covers the experiential part of the intentional state. It is described as "an impression that this is how things are" (Searle 2015:56). Content, however, is a metaphorical term for thought processes that are first and foremost characterized by their function, namely that they determine conditions of

satisfaction, i.e. how the world must be if the intentional state is satisfied. A mode is a psychological state that relates the content to the world. It encompasses all the psychological states that are directed towards something, for example, belief, desire, fear, hope, and perception. The content can basically be related to the world in two ways as described using the concept of direction of fit we encountered in the analysis of speech acts in section 2. Either the content fits the world, or the world must change so that it fits the content. As to perceptions, beliefs, and event memories, they are "supposed to fit how a world is. They have the mind-to-world direction of fit" (Searle 2015:35). Hence, they are satisfied. "Desires and intentions are not supposed to fit how the world is, but how we would like it to be or how we intend to make it. They have the world-to-mind direction of fit" (Searle 2015:35). They are not satisfied.

The last feature Searle associates with intentional states is that they never occur alone, but always come as part of a network of intentional states, and that the conditions of satisfaction of an intentional state are determined in relation to the network. As an example, he mentions that in order to believe that Obama is president, you must believe that the United States has a government, that it is a republic, that there are presidential elections to elect the government's leader etc. To describe this relation between an intentional state and other states, Searle uses the term Network. In connection with this term, Searle notes that perception takes place on the background of abilities and capacities (Searle 2015:37,44), and that the same visual stimuli will produce totally different reactions in people depending on these background capacities (Searle 2015:74). Some of these abilities are innate, others cultural.

It is evident here that there is a correlation between the analysis of intentional states and the analysis of speech acts. Just as a speech act includes a determination of conditions of satisfaction, namely the proposition, and a feature that relates the conditions of satisfaction to the world, namely the force indicator, an intentional state includes a determination of conditions of satisfaction, namely the content, and a feature that relates the conditions of satisfaction to the world, namely the mode. Searle pulls no punches in pointing out this similarity. In several places Searle even writes that intentional states have propositions as content. Although some formulations give the impression that intentional states with a proposition as content are merely a subset of intentional states, Searle writes that it applies "in general" (Searle 2015:14) that intentional states are satisfied or not satisfied, and that the content of the intentional state determines its conditions of satisfaction. Thus, the content of an intentional state has the same function as a proposition of a speech act.

By identifying and explaining this similarity in structure and function, Searle has grounded his theory of speech acts in a theory of intentionality and perception. This close relation may also be seen as a reflection of Searle's

principle of expressibility (Searle 1996/1969:19-21), i.e. all that can be meant can be said. The correlation between content and mode, on the one hand, and the proposition and force indicator, on the other, means that we can not only express a state of affairs, but also how we relate to the state of affairs, whether we hope, want, believe, intend, or fear it, etc. If truth conditions are the starting point, this is certainly a major step forward towards an informative and accurate semantics and grammar of everyday languages.

6. Intentionality and perception in everyday life

We can now compare Searle's theory of intentionality and perception with the intentional states that the utterances (4), (5), and (6) are indications of. The basis for determining what the speakers direct their attention to and what they perceive is a cognitive ethnographic (Hutchins 1995) study of the activity of soaring in two Danish soaring clubs, with particular regard to the role of language in the pursuit of this activity. The study is motivated by systematic discrepancies between the established descriptions of information structure, on the one hand, and the use of language in everyday life, on the other (Borchmann 2019). The purpose of the study is to discover and describe the socio-cognitive tasks that language serves. The theoretical foundation is that human communication relies on a common ground and an ability for shared intentionality, originally evolved in the context of collaborative activities, providing for an especially salient and solid common ground (Tomasello 2008). In line with this, it is assumed that language evolves in and is embedded in non-communicative activities (Linell 2004, Wittgenstein 2009/1953, Vygotsky 1978, Malinowski 1969/1923). It is through the contribution of language to life-sustaining activities that a selection pressure is exerted on the ability to acquire a language (Deacon 1997). The methodological implication of this theoretical foundation is that the language must be studied as part of an activity. This linguistic approach can be called ecological pragmatics (Borchmann 2018, Hodges 2009). This study extends over three years of participatory observations and includes participation in tuition, exams, ground staff work, aircraft maintenance, 200 hours of flight, and data collection in the form of audio recordings, video recordings with head mounted camera, texts, observations, interviews, diaries and field notes. In the cognitive analysis of the situations, I rely on the speech acts that are included in the situations, the non-linguistic actions and events that precede, accompany, and follow the speech acts, and on observations of what comprises important information for glider pilots, what sources of information they use, their procedures for gathering and sharing information, and the search strategies they use. The cognitive analysis is supplemented and supported by studies of visual attention in everyday activities. In the comparison, I will concentrate on situation (4) and use situation (5) and situation (6) exclusively to provide perspective. The reason for this is that it is situation (4) that questions the foundations of Searle's

theory of intentionality and perception. If what Searle calls 'the content of our intentional states' could be insufficiently specific, even when the ontologically objective part of the world we direct our attention to is immediately available, the content of our intentional states could be inadequate in every conceivable situation. In this case, Searle's theory could be misleading in general.

As a preliminary point I will establish what the speaker directs his attention to in situation (4) and show that Searle's distinction between the ontological objective entities and our ontological subjective experiences has decisive explanatory value. What the speaker directs his attention to in situation (4) is present, and thus directly available to perception. The speaker's attention is directed to the cloud base. The cloud base is both the subject of attention in the speaker's non-linguistic acts of lifting his head and looking up, performed immediately prior to the speech act (4), and in the speaker's speech act (4), motivated by the inadequate result of the non-linguistic act. Furthermore, the speaker, along with the other pilots, has directed his attention to the cloud base several times in the minutes prior to situation (4) as well as at the pre-flight briefing an hour and a half prior to (4). In fact, even in the days leading up to the flight, the speaker has directed his attention to the cloud base several times by reading weather forecasts. The reason why the speaker pays so much attention to the cloud base is that it is one of the lawful constraints that determine his action possibilities as a glider pilot. Among other things, the cloud base determines the usable height in the upcoming flight. The cloud base is generally important in aviation because it determines visibility. For these reasons, the cloud base is a well-established topic of communication in aviation: there are precise, standardized instruments to measure the cloud base, common terms, phraseology, and units to communicate about the cloud base, and well-established channels for sharing information about the cloud base and related factors. The aviation-specific weather forecasts the speaker checks in the days before the flight, thus, comprise specific information about the cloud base and related factors, for example:

CET/CEST (+1/+2)	8	9	10	11	12	13	14	15	16	17	18	19
★ Pot. VFR-flight hours	0%	0%	100%	100%	100%	80%	100%	100%	100%	100%	100%	100%
★ PFD (18m, 46kg/m²) [km]				50	65	90	90	85	75	60	40	
★ PFD (Std, 41kg/m²) [km]				45	60	80	85	75	70	50	35	
★ PFD (hang-glider) [km]						12	6					
★ PFD (paraglider) [km]												
★ PFD downwind (paraglider) [km]			28	36	43	51	56	60	58	54	50	42
★ Solar radiation [Watt / m²]	60	300	620	730	800	850	840	810	720	520	460	350
★ High clouds												
★ Midlevel clouds												
★ Spread tendency												
★ Octas of Cumulus						1/8						
★ Cumulus tops MSL [m]						7300	1700	1300	1200	1200		
★ Cumulus base MSL [m]						1300	1600	1200	1100	1100	900	700
★ Usable height GND [m]			700	900	1100	1300	1600	1200	1100	1100	900	700
☆ Usable height MSL [m]			700	900	1100	1300	1600	1200	1100	1100	900	700
★ Thermal strength [m/s]			0.9	1.2	1.5	1.6	1.7	1.6	1.4	0.9	0.8	
★ Thermal strength (Balloon) [m/s]			0.9	1.2	1.5	1.6	1.7	1.6	1.4	0.9	0.8	0.4
☆ Dist. between thermals [km]			2	2	3	18	4	3	3	3	2	2
★ Weather conditions												

Figure 3. Weather forecast for pilots provided by an independent publisher.

Cloud bases are ontologically objective properties of the world. They are parts of the weather system, conditioned by the sun's effect on the earth and the earth's rotation, and they exist independently of our experience of them. One can argue that the perception of cloud bases depends on the perceptual system of humans and on the perceptual ability of the individual, that we as humans select the cloud base as the property we direct our attention to among an infinite set of properties of the environment, that this selection is guided by human interests, and that these interests are a result of the alteration of the environment by humans, including the construction of aircraft and the possibilities they provide. But that does not change the fact that there is also a cloud base if we do not direct our attention to it, nor that it varies independently of our experience of it. This ontological status is crucial for the understanding of the speaker's relation to the world. A change in the speaker's experience of the cloud base will not change the action possibilities the cloud base provides in a given situation, since these are lawfully determined (Turvey 1992, Turvey et al 1981, Gibson 1986/1979) and vary independently of his experience. This is precisely why the speaker could consider the information he picks up by means of the non-linguistic action to be insufficient, this is precisely why he seeks another more reliable source of information than his own perception, and this is precisely why he continuously seeks to update his experience of the cloud base. Thus, Searle's distinction between ontologically objective and ontologically subjective has decisive explanatory value for the speaker's behavior in situation (4). Situation (5) differs from (4) in that the subject of attention is not available to perception. The payment of the sandwich is a past event. Furthermore, to pay is an institutional fact (Searle 1995:27, 1996/1969:50); *pay* designates a status function that humans impose on physical acts (Searle 1995:41), and it is thus not something that exists independently of any human experience. However, the physical act that we impose a status function on can be considered ontologically objective, and it is a prerequisite for imposing the status function and for the explanation of why the speaker acts as he does in situation (5): he must believe that someone has performed the physical act that counts as paying. Situation (6) is similar to (4) in that the subject of attention is available for perception, albeit the speaker would have to make a time-consuming physiological effort to perceive it (see section 4). However, the state of the harness system differs from entities like the cloud base in that it is a property of a human-engineered, controllable system. As Gibson (1986/1979) puts it, it is a property of the environment that man has converted to change what it affords him. In that respect, it may be considered to be ontological objective, i.e. something that exists independently of the speaker's experience of it, and this status helps to explain why the speaker acts like she does with language. So, Searle's distinction between ontologically objective and subjective also has an explanatory value as regards situations like

situation (5) and situation (6). That is, as regards Searle's basic naïve realistic assumption, I believe it is the right basis for an analysis of these situations.

However, when we compare Searle's description of what we direct our attention to with situation (4), there is a discrepancy. The cloud base is not an object. The cloud base is the vertical distance between a level on the ground (field elevation or mean sea level) and the level where air reaches 100% saturation, condenses, and the water in the air becomes visible to the human eye. It is thus a spatial relation between different substances in different forms, and it can be specified mathematically. The cloud base is also not a state of affairs – at least not if the state of affairs has a "more or less permanent existence" (see section 5), since the cloud base varies continuously. Since it involves a constrained and structured variation, it may be considered a (permanent) property of the world. However, when the speaker directs his attention to the cloud base, he does so precisely due to its capacity to change. It is the present state of the variation that determines the speaker's action possibilities and to which he adapts his actions, and the state is changing continuously. This relation not only applies to the cloud base, but to a number of other variations in the pilot's environment: the wind direction, the windspeed, the wind gradient, the dew point, the color of the cloud base, the shape of the cloud base, the shape of the edge of the cloud top, the height of the cloud, the cloud cover, the solar radiation, the airspeed, the ground speed, the altitude, the height, the course, the distance to terminal areas, the distance to the next waypoint, the distance to the nearest airfield, the vertical speed, the thermal strength, the bank angle, the pitch, the yaw, the distance between thermals, etc. Indeed, what the glider pilot in situation (4) directs his attention to in general is variations.

Once you realize that what the speaker is directing his attention to in situation (4) is a variation, it becomes clear that the same applies to situations (5) and (6). The individual who paid for the sandwich may well be considered an object; but it is not that particular individual that the speaker directs his attention to. He cannot do so, because he doesn't know who it is. What he knows is that someone has paid, and that he has to pay whoever has paid. This knowledge is part of his ability to participate in a social system that enables the exchange of goods and services. This part of his knowledge corresponds to what has been described in schema theory as a slot or a terminal in a memory structure (Minsky 1975, 1985). The essential point is that the one who pays varies from situation to situation. Hence, what the speaker directs his attention to is a variation – not in a weather system, but in a social system of status functions. And unlike the cloud base, the variation of which is lawfully determined, this variation is controllable and regulated by social norms and conventions. Furthermore, this variation differs from the cloud base in that there is not the same set of possibilities from situation to situation. In the current situation, there are two possibilities. But next time the speaker has to pay someone who has paid for something, there will be a new set of

possibilities. The practical task the speaker is faced with is to pay the one who has paid. To solve that task, he has to solve the cognitive task of finding out who has paid. This implies that he directs his attention to the variation. In situation (6), the speaker's attention is directed at the state of the back-seat harness system. The harness is a small system attached to a seat in an aircraft and can be in two states: fastened or released. Sometimes it is fastened, sometimes released. Unlike the cloud base, this system is controllable. It varies with the harness operator's actions. Unlike the payer variation, the set of possibilities is the same in each situation, and unlike the cloud base, which includes a large set of possible states, it only includes two possible states. This is exactly why it can be handled and is handled with the binary yes/no question. Thus, the state of the harness system is also a variation. And for reasons of safety, the speaker must direct her attention to this variation and determine its state. That is, for all the situations of (4), (5), and (6) it applies that the speaker directs his or her attention to a variation. Thus, judging from the situations of (4), (5), and (6), Searle's assumption as to which ontologically objective entities we direct our attention to is misleading.

There is also a discrepancy when we compare Searle's description of the intentional states of perception with the speaker's perception in situation (4). What the speaker must perceive in order to determine the cloud base by means of visual perception is a structure in stimuli (see figure 1). The speaker's problem in situation (4) is that his perception is insufficient relative to the solution of the task that motivates the allocation of attention to the cloud base, namely to decide whether to start now or wait. That's why he radios the pilots in the air. Thus, the experiential component of the speaker's intentional state of perception cannot be said to determine conditions of satisfaction. On the contrary, it is characterized by an inadequate specification. If we attempt to defend Searle's theory by claiming that what the pilot perceives is a deficiency, and that the deficiency represents the conditions of satisfaction, we are back in the solipsistic prison Searle is trying to free us from, namely the assumption that what we perceive is not the ontological objective entities, but our ontologically subjective experience of the ontological objective entities, i.e. the assumption of indirect perception. Hence, the theory cannot be saved by such ad hoc adjustments. It is also misleading as a description of the speakers' intentional state in situation (5) and situation (6), i.e. situations where the speaker has no access or no immediate access to the necessary information. These intentional states are also insufficient as determinations of conditions of satisfaction. One can argue that the speaker in situation (6) could have a complete determination of conditions of satisfaction in the form of a representation of the harness system in one of the two possible states. But even if the variation only includes two possible states, it is of no benefit to the speaker to form a representation of the variation in either of the two states. I have no evidence that the speaker did not form a representation, but it is

implausible, since the cognitive load of pilots – and not least pilot students – in the preflight check gives an incentive to avoid any unnecessary cognitive effort. And anyway, the representation is of no use to the pilot. She can just ask. In any case, Searle's assumption that intentional states are representations or presentations that determine conditions of satisfaction is misleading as regards situations like (4) and (5).

The above analyses also demonstrate that directing one's attention to something is not the same as perceiving it. Not even if what we direct our attention to is present and immediately available to perception as in situation (4). Directing one's attention to something is an act, and perception is the possible result of directing one's attention to something. What is crucial in describing situations such as (4) is that the act of directing one's attention to something can be completed without it resulting in an intentional state that determines conditions of satisfaction. When Searle categorizes perception as a form of intentionality, he does not distinguish between the act of directing one's attention to something and perceiving. There are two problems with this. First, he does not take into account that perception for a large part must be learned. Although Searle emphasizes that perception must be learned, the analysis of intentional states assumes that the perceptual ability is complete. In situation (4), however, the speaker has not yet learned to differentiate the cloud base well enough by means of perceiving. He can perform the act of directing his attention to the cloud base, but the result of the act is inadequate. To be sure, Searle notes that every perception takes place on a background of abilities and capacities (Searle 2015:37), but what this does to perception, how the background is established, and the role played by perception in establishing this background is not clear. In any case, the assumption of background has no consequences for Searle's analysis of intentional states. Secondly, the temporal aspect is ignored, the fact that directing one's attention to something is something that takes place in time, and hence, that there is something that precedes, happens simultaneously with, and follows attentional acts. Searle does note that intentional states are processes and that they are parts of networks that determine an intentional state's conditions of satisfaction. But this has no consequences for the analysis of intentional states. In other words, background and network appear to be two cogs in the theoretical machinery that can turn without anything else moving.

Regarding the use of situation (4) as a basis for evaluating a theory of perception, it can be objected that perception should be described on the basis of successful cases and not by means of errors or deviations. But the inadequacy of the perception in situation (4) is neither an error nor a deviation. The pilot must solve the cognitive task of selecting a future action. Appropriate selection requires information. The information he can pick up here and now is insufficient relative to the solution of the cognitive task of

selecting a future action. Therefore, he performs an act to provide the required information. First, he raises his head and looks towards the sky, and then he asks the pilots in the air. Both these acts are motivated by the inadequacy of the perception relative to the specific requirements of the cognitive task, and guided by the requirements. Indeed, it may be argued that the inadequacy of intentional states is a general condition in the skillful practitioner's pursuit of activities in a dynamic environment. Studies of the visual attention of humans engaged in activities show that their gaze shifts from one region of the environment to another continuously. For example, the gaze of a driver steering through dense traffic will shift at approximately half-second intervals from the car in front, to oncoming traffic, to the car in front, to the open roadway, to the near-side offroad etc. (Land & Tatler 2012 7:20). In trying to answer the question of what drives such sequences, studies with head-mounted eye trackers have established an intimate link between visual attention and the current action goals (see Tatler & Land 2015 for a review). Fixations are highly constrained to task-relevant information (Land & Tatler 2012 3, Rothkopf et al 2007, Hayhoe & Balard 2005), and the temporal patterns of fixations are largely determined by the action sequences (Land & Tatler 2012 3:29). Thus, vision leads action by about 0.5-1 second in a number of different activities (Tatler & Land 2015). That is, where we attend is not determined top-down by saliency, but guided top-down by tasks. Visual attention does more than support the immediate task. Some fixations are look-aheads, i.e. fixations on information not relevant to the immediate task, but relevant for a future task (Pelz & Canosa 2001:3593). In line with these observations, Tatler and Land (2015) suggest that it is appropriate to consider attention "not as an isolated system, but as part of a broader network of vision, action, planning during interactions with the environment" (Tatler & Land 2015:391). The greater lead time by the eyes over action is specific to experienced practitioners (Hayhoe et al 2012, Land 2006, Land & McLeod 2000), and more generally it could be argued that the perception of skillful practitioners is oriented towards future actions (Tatler & Land 2015, Foulsham 2014, Thomas & Riley 2014, Land & Tatler 2012, Buckley et al. 2011, Pelz & Canosa 2001, Land et al 1999, Patla & Vickers 1997, Land & Lee 1994). As to the adequacy of intentional states, the point is this: it may be that the perception of the driver who, 0.1 second ago, has directed his attention to the oncoming traffic, is adequate. However, in a few tenths of a second, the perception will be inadequate relative to the task the driver is engaged in. That is, because practitioners engaged in activities needs to control the ongoing action and select future actions, because the conditions for the practitioners' control and selection of actions are constantly changing, and because they cannot pay attention to all these changes at once (Neumann

1990, Allport 1989, van der Heijden 1986), the inadequacy of perceptions is a general condition in the skillful practitioner's pursuit of activities in a dynamic environment. This is exactly why their gaze shifts from one region of the environment to another continuously. These movement are what Land & Tatler (2012 3:1) quite fittingly describe as "how our eyes question the world".

The inclusion of the temporal aspect also invites reflection on Searle's description of the causal relation between ontologically objective entities and ontologically subjective intentional states. The speaker's perception in situation (4) is causally conditioned by the light's influence on the retina according to optical laws. The observations give us no reason to doubt that, nor that this causal relation is in some sense intrinsic to the speaker's perception. All the speaker's actions indicate that he believes that reliable information can be collected from the environment - that there is a lawful relation between the structures in stimuli he can perceive and the opportunities for action the environment offers him as a pilot. Indeed, the whole activity, e.g. the training of the pilots, the sources of information about the weather used by the pilots, the design of instruments and information systems, is based on this assumption. In that regard, Searle's description of the relation is accurate. But it is a one-sided description compared to the speaker's possibilities for choosing, delimiting, and changing the visual field, i.e. by lifting his head, turning his head, walking backwards, squinting his eyes, etc., and for choosing what his attention is directed at in the visual field - whether it is the cloud base, the shape of the cloud base, the color of the cloud base, the shape of the edge of the cloud top, the height of the cloud top, the cloud cover, the layer of clouds etc. These possibilities suggest that the perceiver's relation to the stimuli that surround him may be regarded as a mutual causal relation. Directing attention to something is an act that has a certain informative effect, given that the environment is as it is. In other words, the speaker is manipulating his relation to the environment, and the environment is responding with information. Thus, it is a feedback loop of action and perception. Note that this does not mean that the speaker can determine what he perceives when he has chosen his visual field and chosen to direct his attention to one particular variation rather than another. The state of the variation is independent of the perceptual act. So, we might say that the mutual causal relation is between a perceptual act and a variation, i.e. a set of possible states. The same applies to (5) and (6), although here the manipulation is based on a linguistic, conventionally mediated relation to the environment (Borchmann 2018, Golonka 2015, Harder 2010).

For the above reasons, Searle's description of the relation between the content of intentional states and the world is insufficiently informative. The actions in the situations of (4), (5), and (6) do not consist in making the world fit the content of the intentional states of the perceiver. They consist in engaging with the world. The starting point of the speech acts in these situations is an

inadequate specification. The inadequacy motivates the speaker's intentional action, and the result of the intentional action is a specification. The speakers manipulate their relation to the world in order for the world to respond with information. Hence, it is not a relation of fit between the content of an intentional state and the world, but a dynamic relation of acquiring information. When we compare Searle's idea of direction of fit with the situations of (4), (5), and (6), its limitations become obvious. The idea implies that what we need is already specified. Thereby, it ignores the encounters with the world through which we acquire specifications.

To summarize, when we compare the theory of intentionality and perception that forms the basis for Searle's theory of speech acts with observations of people's relations to the world in an everyday activity, several discrepancies appear. Thus, the problems with Searle's theory of speech acts that we identified in section 2 are not merely semantic details. They are related to assumptions of intentionality and perception that conflict with what we can observe in the situations that give rise to the speech acts. And it is these discrepancies that cause the problems. The assumptions that cause problems are: a) what we direct our attention to are objects and more or less permanent states of affairs, b) the content of our intentional states determines conditions of satisfaction, c) there is a one-sided causal relation between ontologically objective entities and our intentional states, and d) the relation between our intentional states and the world is a relation of fit. These assumptions ignore the active, the interactive, and the dynamic aspects of intentionality and perception. In the next section, I will consider the origin of the discrepancies, and on the basis of these considerations I will explain why Searle's theory of intentionality and perception is insufficient as a basis for a general theory of speech acts.

7. Intentionality and perception in idle and intentionality and perception in operation

7.1. Two different phenomena

It is surprising that some quite simple observations of ordinary situations in daily life can challenge a carefully conceived, nuanced, coherent philosophical theory - a theory that is an extension of and relates to a long philosophical tradition of other carefully conceived, nuanced and coherent philosophical theories. This holds especially when the theory considers perception to be a biological phenomenon. How can the assumptions about our relation to the world as humans differ so significantly from the relation we can observe in an activity of everyday life? Surely, the question we are trying to answer is whether Searle's theory of intentionality and perception is sufficient as a basis for a general theory of speech acts. But answering the question about the causes of the discrepancies helps to clarify whether or not the theory is sufficient.

When trying to understand why there are discrepancies between Searle's theory and what we can observe, it is informative to compare the three situations with the situation Searle uses as a starting point for the analysis of intentionality and perception. This situation is described in the following:

> Let us describe a more realistic scene: I am now looking at San Francisco Bay out of the upstairs study of my house in Berkeley. I see the city of Berkeley in the foreground, the Bay in the background, and on the distant horizon the city of San Francisco, the Golden Gate Bridge, and the hills of the Peninsula. In the immediate foreground, I also see the table on which I am working, the computer with its illuminated screen, various books and papers on the table, and my dog, Tarski, sitting on the floor at my feet. This is a continuous visual experience and I can shift my attention at will. I can even shift my attention without shifting my eyes. I can focus my attention on different aspects of the scene. Sometimes, for the sake of simplicity, in this discussion I will concentrate on certain elements, for example, seeing the table, but we should keep the complexity of this scene in mind as we proceed. (Searle 2015:53)

In introducing this example, Searle criticizes the philosophical tradition for presenting overly simple examples of perception such as seeing a lump of wax or a tomato. As set out above, Searle considers it important that the example is realistic. Nevertheless, there are a number of very notable differences between the situation Searle describes and the three real situations we have compared his theory to in section 6. The first thing immediately noticeable is that the intentionality in Searle's example appears to be random. First, he directs his attention to Berkeley (no pun intended), then the Bay, then San Francisco, then the Golden Gate Bridge, then the hills of the Peninsula, then his table, then his computer, then various books and papers, and then his dog. It is unclear why he directs his attention to these things, and why he does it in that order. There is no clear pattern or guiding principle. The only organization of the sequence is 'first something far away, then something close by', and the only delimitation of the set of subjects of attention is 'what can be seen from this place'. In contrast, the intentionality in the situations of (4), (5), and (6) is targeted and systematic. The speakers direct their attention to variations in the environment, the states of which are relevant to the solution of tasks they are confronted with, and the sequences are determined by the requirements of the tasks and the results of directing attention to a variation. In situation (6), for example, the allocation of attention to the state of the harness system in the rear seat is part of a procedure for allocating attention to a set of variables in the overall flight system. The guiding principle is relevance with regard to the realization of the values that guide the solutions of the tasks, in situation (6) first and foremost safety and efficiency. Another characteristic difference

is that Searle's situation is static. Nothing happens, and the perceiver does nothing except move his gaze. In contrast, the situations of (4), (5), and (6) are dynamic. Everything that is relevant to the speaker is changing, and the speakers are actively seeking information as they solve practical tasks based on the information they pick up through their intentional acts. In situation (4), for example, the speaker lifts his head in order to pick up information about the continuously changing cloud base, because he needs to decide when to perform the practical task of taking off. A third characteristic difference is that each intentional state in Searle's situation appears fragmented and isolated. The only relation between them is that they belong to a presentation of the same "scene" - whatever the meaning of that metaphor is. Searle does write that we focus our attention on certain aspects, but which aspects he focusses on, and how these aspects are related to each other, is not clear in the example. Likewise, the sequence of intentional states from Berkeley to the dog is not related to prior states or states that follow. In contrast, the speakers' intentional states in the situations of (4), (5), and (6), respectively, are all related to each other in that the ontologically objective variations they direct their attention to are variables in a dynamic system characterized by complex feedback relations between variables. And the fact that the speakers direct their attention to precisely these variables in the system is a result of their attunement to the system and a prerequisite for solving the tasks they are confronted with. In situation (4), for example, there is a complex reciprocal relation between the cloud base and the start time: on the one hand, the start time is determined by the cloud base, on the other hand, the requirement for the cloud base is determined by the distance of the planned task, which is determined by the start time. That is, if the value of one variable in the system changes, so do the values of all the other variables. And the set of intentional states of the situation is delimited by the actions and events that precede it and influences the actions and events that follow. In situation (4), the set of intentional states is delimited, among other things, by the night temperature, the waypoints in the scheduled task and the planned flight distance. And the set influences the start time, the speed, the strength of the thermals, the distance between the clouds, and the landing time. Thus, these intentional states are not isolated or fragmented, but are all embedded in a complex, dynamic system.

As noted in section 5, Searle emphasizes that intentional states only determine their conditions of satisfaction within a network of intentional states. However, in the example above, it is unclear what other intentional states determine the conditions of satisfaction. Therefore, it is also unclear what the conditions of satisfaction are: How, for example, can we know that he perceives the city of Berkeley? What are the criteria for perceiving the city of Berkeley? In fact, the only criterion for perception in the example is that he uses the names of the cities, the bridge, the hills, and the objects he claims to perceive. But in a context where the aim is to base a theory of speech acts on a theory of intentionality and perception, this is not a criterion, but

circular reasoning. By contrast, the criteria are clear in the situations of (4), (5), and (6); there are simple concrete external criteria to which the respective speakers direct their attention, namely the cloud base, the person who paid for the sandwich, and the state of the back-seat harness system, and the criteria regarding whether or not they experience the ontologically objective states of these variations, namely the non-linguistic acts that follow the speech acts: in situation (4) that the speaker waits to start until the cloud base is 900 meters, in situation (5) that the speaker pays the person who paid for his sandwich, and in situation (6) that the speaker only takes off if the passenger's harness is fastened. Hence, a fourth characteristic difference between the situations of (4), (5), and (6) and Searle's situation is that there are clear external criteria for intentionality and perception in the former, whereas there are no clear criteria for intentionality and perception in the latter.

The abovementioned four differences all express one and the same fundamental difference: the intentionality in the situations of (4), (5), and (6) is embedded in an activity governed by certain goals and values, determining what is relevant to pay attention to and setting the criteria for perception, whereas the intentionality in Searle's situation is arbitrary and constitutes an activity in itself. The difference between what we can observe in the situations of (4), (5), and (6) and what Searle describes is clearly so great that we must conclude that we are dealing with two different phenomena. The intentionality and perception that can be observed in the situations of (4), (5), and (6) are embedded in an activity, which means that they are targeted, systematic, dynamically oriented, adapted to a system characterized by complex feedback relations, and have clear external criteria for perception. This is intentionality and perception in operation. The subject of Searle's description is intentionality and perception that are arbitrary, that is, random, statically oriented, fragmented, isolated, and without clear criteria, i.e. independent of practical life. I will call this intentionality and perception in idle. It may be that Searle's concepts of network and background are designed precisely to account for the embeddedness of intentionality and perception, but the network and background do not appear to have any consequences for the perceptual activity in his example or the analysis of intentionality and perception. Thus, when Searle's philosophical theory of consciousness differs from what can be observed in a cognitive ethnographic study, the reason for this is that the theory and the observations have different scientific objects.

It is very interesting to compare the example Searle uses with examples from everyday life such as the situations of (4), (5), and (6). For whereas Searle's example appears to be realistic and compelling when you read it in the context of other philosophical works, it is suddenly disclosed as a bizarre activity: the perceiver is in his study alone, and then he starts mentioning the names of some of the cities, bridges, hills he can see from the window, and

some of the objects he can see in the room. It is possibly only philosophers, poets, and daydreamers that engage in such an activity (although it resembles certain name games played by children and adults that may serve different meaningful purposes). One can only guess how Searle's theory would have been developed if it had been based on an example of an ordinary activity where intentional acts and perception are subject to requirements, and where there is immediate, unambiguous, and concrete feedback if the person's intentional acts and perceptions do not meet these requirements, e.g. driving a car, walking down a flight of stairs, making tea, feeding an infant, or whipping cream. But there are good reasons to believe that the theory would (and should) have been developed differently.

7.2. Internal discrepancies in Searle's presentation of the theory

The comparison above also points to two internal discrepancies in Searle's presentation of the theory. Searle claims that perception is a biological phenomenon and compares the perception he describes with hunger. But whereas hunger clearly has a biological function, it is not clear what biological function the perceptual activity of looking out of his study window has. For example, what biological function is involved in looking at entities of the kind referred to by the words *Berkeley*, *computer,* and *book*, and why look at them in the order he does? If we apply an evolutionary perspective, it is also clear that hunger provides an edge, and that organisms with motivations to seek food are selected for. On the other hand, it is unclear how the perceptual ability Searle illustrates in his example provides an edge, and why and how the perceptual activity he describes exerts a selection pressure on perceptual systems. In other words, if we ask what we need to direct our attention to and perceive in order to survive, Berkeley and a book are not very convincing answers. To put Searle's examples into perspective, the cloud base specifies human's possibilities for visual perception, and perceiving the cloud base is crucial to a number of life-sustaining activities, e.g. hunting, farming, and protecting our offspring against the cold. On the whole, we must assume that our perceptual system, including our ability to direct our attention to specific properties of the environment and perceive them, is hardly developed for the purpose of idling, i.e. for being random, statically oriented, fragmented, isolated, and independent of practical life. The perceptual system selected for is most likely the system that enables life-sustaining activities. Once this perceptual system has evolved, it is, of course, possible to perform the particular activity Searle illustrates. But this is not something the system has evolved for, and it is not an activity that characterizes perception as a biological phenomenon. When we consider what Searle describes as perception in a biological and evolutionary perspective, it appears to be an epiphenomenon of perception.

Another discrepancy emerges if we try to consider what Searle is doing in the example above, relative to the assumption of direct perception. What

he is doing is mentioning the names of some towns, a bridge, some hills, and a small number of objects in his office. The words he uses are not words that indicate which aspect you should direct your attention to, e.g. what it can be used for, how it relates to something else, or other concrete sensory properties that make it relevant for the perceiver to direct attention to it and provide clear criteria for perception. The terms are abstract; they are constructed or derived categories of places and things, and they can only be learned once we have acquired a language. A child in the prelinguistic phase cannot direct his or her attention to and perceive Berkeley, San Francisco, Golden Gate Bridge, the Hills of the Peninsula, a table, a computer, a book, or an article. What it can perceive is if something affords sucking, drinking, warmth, burning, overturning, walking, seating, throwing, pushing, moving, pressing, tearing, curling, bumping into, seeing through etc. In other words, a child does not differentiate the environment in the categories Searle uses in the example. To put Searle's examples into perspective, a child in the pre-linguistic age can perceive the cloud base. Clearly though, a child cannot differentiate the cloud base well enough relative to the pursuit of a range of activities, but the child can perceive whether the air's saturation of water is above or below 100%, and it can perceive the difference between a cloud base of 1000 meters and 0 meters. This is not something to be acquired through language. Most of the ways of differentiating the environment that Searle illustrates in the example are abstract, more or less constructed, and can only be acquired linguistically. With Searle's own distinctions, words such as *Berkeley*, *San Francisco*, *computer*, *book,* and *article* are used to refer to status functions, and thus ontologically subjective, observer-dependent, institutional facts rather than ontologically objective, observer-independent, brute facts. This means that the experience of them is mediated. Contrary to Searle's intention, his own example casts doubt on whether we perceive directly. In any case, it is very difficult to argue that what Searle illustrates in his example is direct perception. More than anything else, it appears to be categorization. On this point, I cannot help having the impression that it is the theory of intentionality and perception that is based on the theory of speech acts, including predication, rather than the other way around.

In summary, if one wants to base a theory of speech acts on a theory of intentionality and perception in operation, Searle's theory is not an obvious candidate. Furthermore, if the theory we are looking for is a theory of direct perception, Searle's theory is not a very convincing proposal.

8. Conclusion

In section 3, I have shown that Searle's analysis and classification of speech acts is misleading when applied to three common, simple, semantic variants of questions in everyday language use. I have traced this inadequacy back to the theory of intentionality and perception that forms the basis of the theory

of speech acts. In section 6, I have shown that the theory of intentionality and perception is insufficiently informative and misleading in relation to the intentionality and perception we can observe in the situations in which these three questions arise. In section 7, I have explained these discrepancies between Searle's theory, on the one hand, and observations of everyday life's intentionality and perception, on the other, by the fact that the theory and the observations have different objects: The intentionality and perception we can observe in everyday life are intentionality and perception in operation. What Searle describes are intentionality and perception in idle.

In assessing Searle's theory of intentionality and perception as a basis for an analysis and classification of speech acts, one must take into account the knowledge interests by which it is driven. Here, it may be relevant to note that Searle's theory is a philosophical theory, and that it relates to philosophical issues. When the theory concentrates on objects and permanent states of affairs, describes intentional states as conditions of satisfaction, and determines the relation between intentional states and the world as a one-sided causal relation, it is most likely a consequence of the fact that it deals with epistemological questions such as 'what is knowledge?', and 'how do we know that we know what we know?'. Furthermore, as the theory of intentionality and perception is to form the basis of a philosophical theory of language, it must enable the theory of language to answer epistemological questions such as 'what do we mean when we say that something is true?' and 'what have we committed ourselves to when we have made a scientific claim?'. Therefore, references to objects and specifications of truth conditions (whatever we call them) are fundamental both in the theory of intentionality and perception and in the theory of speech acts. That is, Searle's theories are primarily driven by an epistemological interest. Against this background, one might ask why I compare such theories with situations in everyday life. There are two reasons for this. First of all, Searle claims that what he describes is everyday language use and perception and that his examples are realistic. Secondly, a wide range of linguistic descriptions rely on Searle's analysis and classification in the description of everyday language use. Therefore, it is legitimate and relevant to compare Searle's theories with situations in everyday life and to draw attention to what one subscribes to if one bases a description of language and language use on Searle's analysis and classification of speech acts.

Of course, this does not mean that the above epistemological questions are not important. However, it is not given that a linguistic description of everyday language use should answer such questions. This article is written from the point of view that a description of everyday language use should be informative and accurate, i.e. it must identify the tasks that language fulfills in everyday life and provide a basis for accurate predictions of how, including by means of which structures, in which situations, and with which effects, it fulfills these tasks. It could be argued that, in principle, a description could

serve both an epistemological purpose and the aforementioned purpose. But what the observations of intentionality and perception in daily life have shown is precisely that there is a difference between the ideal situation we are in when we make a scientific claim and the actual situation we are in when we solve the practical tasks that we are confronted with in daily life. Judging from the situations of (4), (5), and (6), people's psychological basis for a speech act in the activities of daily life is not necessarily a specification of how the world must be if the speaker's intentional state is satisfied, but often an inadequate specification. The relation between intentional states and the world is not a one-sided causal relation in daily life, but rather a feedback loop of action and perception. People do not seek truth values, but specific action-guiding information. The question of truth does not seem to play a particularly important role in the language use of everyday activities, but is settled prior to language use by the choice of the source of information. People do not pay attention to objects and more or less permanent states of affairs in the pursuit of daily activities, but to variations. People's requirements for linguistically conveyed information are not that this information fits the world, but that it is sufficiently specific to allow the selection of an action that contributes to the solution of a practical task. Therefore, the tasks that language fulfills in daily life are also different from the ones it ideally fulfills in scientific work. Therefore, we must expect that the speech acts we perform in everyday life are different from those performed as part of a scientific work. And therefore, we must also expect that the semantic structures of these speech acts differ from those assumed and focused on in an epistemologically oriented description of language. Thus, Searle's theory of intentionality and perception is not a sufficient basis for a general theory of speech acts of everyday life.

If we want to make an accurate and informative analysis and provide a functional characteristic of speech acts of the type I have analyzed in the examples in this article – three simple common, semantic variants of questions - we need to base our analysis and characteristics on an alternative theory of intentionality and perception. In Borchmann (2018, 2016), I have proposed Gibson's theory of perception, including his theory of affordances and information, as such a foundation. Using this theory as a basis for a study of language, we will discover a) a number of socio-cognitive tasks that language serves in addition to referring to objects, categorizing objects and representing state of affairs, b) an alternative to the semantic structure of predication, and c) alternatives to the semantic functions of reference and predication. These discoveries are vital to an accurate and informative semantic and grammatical description of a given language.

Notes

[1] Searle's argument for basing the analysis on the so-called simple case is: "Until we can get clear about the simple cases we are hardly likely to get clear about the more complicated ones" (Searle 1996/1969:33). Thus, Searle simply presupposes that F(referring and predicating) is the simple case.

[2] Searle (1996/1969) does provide representations of the semantic form of questions. For example, "How many people were at the party" is represented as "?(X number of people were at the party)", and "Why did he do it?" is represented as "?(He did it because ...)" (Searle 1996/1969:31). However, as will be shown in this section, these representations raise a number of issues, and these issues are not addressed by Searle.

[3] In the article I will use the numerals *(4)*, *(5)* and *(6)* to refer to the speech acts and *situation (4)*, *situation (5)*, and *situation (6)* to refer to the situations in which the speech acts occur.

[4] I prefer the notion 'listener' because it emphasizes that this party of the communication is motivated and active and participates intentionally.

[5] The wording of the complete transmission is: "hotel delta november ni hvad er skybasen" (*hotel delta November nine what is the cloud base*). *Hotel delta* identifies the receiver, *november ni* identifies the sender.

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