Anticipating critique and occasional reason: modes of reasoning in face of a radically open future

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Abstract

In this paper we have argued for a new conceptualisation of strategic foresight. The existing approaches are largely based on too simple a concept of future. It is usually assumed that one is able to conceptualise already in the present all possible future developments. We contrast this with the concept of a 'radically open' future, which might develop in ways which go beyond of what our cognitive categories allow us to conceptualise. Drawing on linguistic philosophy it is shown how our thinking and communicating is limited by our linguistic categories. Strategic foresight from this perspective is largely concerned with the adjustment of the linguistic system to novel developments of the world. This requires an openness towards new linguistic categories. Drawing on the philosophical concepts of 'anticipating critique' by Paul Feyerabend and 'occasional reason' by Helmut Spinner we try to show how such an openness can be accomplished.
Introduction

Despite the importance that is generally placed on the investigation of the future, our understanding of the phenomenon of strategic foresight is still rather limited. Traditionally foresight has been framed in terms of extrapolations of past experiences. Such an approach, however, as Ansoff (1975; 1980) and many others have argued is completely inadequate in the field of strategy, where the focus is less on continuity than on discontinuity. If one bases one's view of the future exclusively on past experiences one won't be prepared for new strategic threats or opportunities, which by definition mark a difference with the past. Strategic discontinuities are thus systematically out of sight. Particularly in our times of increasingly turbulent environments with accelerated and fundamental changes (cf. Ansoff/Sullivan 1993; Bettis/Hitt 1995; D'Aveni 1994; Kirkbride/Durcan/Obeng 1994; Lombriser/Ansoff 1995; Waterhouse, 1992) such approaches are proving more and more inadequate. The faster and the more radically the world changes the more important it becomes for organisations to sense discontinuities as early as possible in order to leave enough time for appropriate reactions. As such strategic foresight is mostly conceptualised as the ability to pre-sense discontinuities; in particular by being open to so-called 'weak signals' (Ansoff 1975; 1980; Seidl 2004), which point at impending discontinuities. The classical example, here, is the petroleum crises in the 1970's which could have been foreseen, if the organisations had been more responsive to the various reports containing forecasts on possible Arab action. A more recent example is the terrorist attack on the Twin Towers which struck all Western organisations by complete surprise although, as we now hear, there had been weak signals pointing at it, which just seem not to have been taken seriously enough at the time. For these and similar approaches strategic foresight has to do with the
attentiveness towards signals for future discontinuities. This can be achieved through a systematic scanning (and monitoring) of the relevant environments and a meticulous analysis of the data gathered.

Although the shift of focus from continuity to discontinuity as exemplified by Ansoff's concept of 'weak signals' has been an important step in the conceptualisation of strategic foresight, a crucial problem in all of that hasn't been adequately addressed as yet: Almost all approaches to strategic foresight assume that the future developments remain within the bounds of our present imagination. But, as our experience has shown the world evolves in ways which often transcend what we can imagine with our presently given cognitive categories. For example, two hundred years ago one could not imagine the use of electricity; or at the beginning of the 20th century nobody would have been able to think about a world with computers. In these cases, even if there had been some weak signals about these developments one would not have been able to interpret them. Thus, the problem here is rather one of cognitive limitations. While these examples certainly are quite extreme, one shouldn't dismiss the argument as irrelevant. Even if the changes aren't that radical they might nevertheless go beyond what we can 'adequately' grasp with our presently given cognitive categories. Especially within the field of strategy such developments are not to be thought of as exceptions; on the contrary, they are surely at its heart. As such the cognitive limitation can be seen as a central issue of strategic foresight.

This paper is structured in three parts. In the first part we will present different notions of future. We argue that most approaches to strategic foresight are based on too simple a concept of future and thus are only of limited use. Instead we propose the concept of the 'radically open future', where the future might develop in ways which transcend our
present cognitive categories. This raises important questions about the ability of thinking and communicating about such developments at all. In the second part we will introduce the concepts of anticipating critique and of occasional reason by the two philosophers Paul Feyerabend and Helmut Spinner respectively, which might offer suitable modes of reasoning in the face of a radically open future. In the third part we will show how these two concepts can be applied to the issue of strategic foresight in organisations.

1. The concept of future

In almost all areas of business and management studies the 'future' plays an important role. The way the future is conceptualised, however, varies somewhat. This can best be seen in decision theory, which is underlying much of contemporary business and management thinking. In decision theory one usually distinguishes three types of futures with regard to the information that the decision maker possesses about it (originally Knight 1921): (1) decision under certainty, (2) decision under risk and (3) decision under uncertainty. The first case describes a situation in which the actor knows exactly what will happen in the future. The future as such is predetermined – even from the perspective of the decision maker. In the second case the decision maker doesn't know which developments he will see in the future but he is aware of all possible developments and knows with what probability which development will take place. The future in this case is conceptualised as open, but only within certain limits. In the third case the decision maker merely knows all possible future developments but doesn't know the likelihood of any of these taking place. The future, here, is more open than in
the second case, but the openness of the future remains within the limits of our imaginable world.

Most approaches in business and management studies assume one of the three types of future. Also Ansoff's concept of 'weak signals' is ultimately based on a notion of future which is close to the third one described above. He implicitly assumes that if one had the right cues for possible future developments (and if one took them seriously) the conceptualisation of these developments wouldn't be a problem. In other words, such approaches presuppose that all possible future developments can be conceptualised already in the present – at least in principle.

The future described in these cases is an open future, but it is open only to a certain degree: it excludes any developments that would go beyond what we can presently imagine. We might call this notion the concept of 'a partly open future'. We can contrast this with the notion of a 'radically open future', which is characterized by the fact that the world can evolve in ways which we are not able to conceptualise at present; which goes beyond our presently given cognitive categories (cf. Kirsch 1997). This concept of future is very much based on the so-called “linguistic turn” (Rorty 1967) in the social sciences. Briefly summed up the most important characteristic of the linguistic turn in the social sciences is the focusing on language as structuring or conditioning our 'access to reality'. Language determines what we perceive as existing (cf. Gergen 1982: 101; Rorty 1989). Since the linguistic categories do not correspond directly to 'the world out there' neither our perceptions of it do. In this sense one can say that language to some extent produces a specific reality for us. Whorf explains:

“We dissect nature along the lines laid down by our native languages. The categories and types that we isolate from the world of phenomena we do
not find there because they stare every observer in the face; on the contrary, the world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds – and this means largely by the linguistic system in our minds. We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement that holds throughout our speech community and is codified in the patterns of our language.” (Whorf 1956: 213)

The particular linguistic system – or 'language game' (Wittgenstein 1953) – that is relevant at a particular time and place determines the ways in which the world is conceptualised and experienced; different linguistic systems lead to different conceptualisations and experiences. A classical example here is the huge number of different categories of snow that the language of the Eskimos contains. Due to that Eskimos have a different (in particular, a much more differentiated) experience of snow than an average non-Eskimo. Based on these particular linguistic categories the Eskimo sees differences in the world where the average non-Eskimo doesn't (cf. Weick/Westley 1996: 446).

Linguistic systems, however, are not static but change in the course of time: new linguistic categories are added from time to time while other ones might disappear again. In this sense our ancestors based on the linguistic system of the time would have experienced their world very differently from the way we experience it today with our present linguistic system. But even we ourselves might come to see our world differently over the course of our lives as our linguistic system changes.

If we assume that the way we experience the world varies with the development of our linguistic system, we have to acknowledge that our future experiences might not be
describable within our present linguistic system; in the same way as we wouldn't be able
to conceptualise the many different categories of snow that an Eskimo naturally
distinguishes. With regard to strategic foresight this is a much more fundamental
problem than the ones described in the conventional approaches. The problem is not so
much of finding the right cues for future developments but about limitations of
conceptualising future developments. The linguistic categories at present might not
allow for describing future experiences – based on yet to develop categories. In other
words the appropriate language for thinking and communicating about the future world
might not be developed, yet. A very recent example is the rise of the world wide web.
For many corporations this development has revolutionised the way they do their
businesses. As such its introduction in the early 1990's can be described as a classical
strategic discontinuity confronting many corporations with substantial strategic
opportunities and threats. However, only a couple years earlier the world wide web had
been unimaginable for the average individual. One lacked the linguistic categories for
appropriately describing its function and strategic implications.

The philosopher Friedrich Kambartel (1989) describes this phenomenon as a
"transcendence of grammatical borders". He argues that the world often evolves in such
a way as to transcend what our presently given 'grammar' of language allows us to
conceptualise. With the idea of 'grammatical boundaries' Kambartel alludes to
Wittgenstein's famous thesis: "the limits of my language mean the limits of my world"
(Wittgenstein 1963: 5.6). As already Whorf pointed out, a specific linguistic system
allows for infinite ways of conceptualising the world, but it also excludes infinite other
possibilities (Whorf 1956: 121-122). For example, the English language system allows
us to formulate an infinite number of sentences, but it also excludes some formulations
which are possible in other languages. The particular language provides boundaries of what can and what cannot be conceptualised on its basis. In this sense the development of the world might lead to new situations which lie outside of our present grammatical boundaries; our existing linguistic categories do not 'fit' the new situation. In order to conceptualise the new situation a new linguistic system – or as Kambartel says: a new 'grammar' – is needed. In other words, for an 'adequate' grasp of the world the grammar needs to develop alongside the development of the world. Thus, the evolution continuously makes the existing language systems obsolete and demands the proliferation of other and new constructions on the basis of which new developments can be grasped.

If we accept the linguistic turn in the social sciences and the remarks based on Kambartel, the possibilities of foreseeing radical changes is rather limited. In order to foresee developments that transcend the present grammatical boundaries it would be necessary to 'stretch' the given linguistic possibilities at the time. One would have to be able to think and communicate beyond what the linguistic system allows us to think and communicate. In the following we will explore possibilities for doing so.

For this we need to differentiate between thinking and communicating. Up till now we have treated the two as one and the same. We assumed that the given linguistic system conditions our thinking and communicating in the same way. Accordingly Whorf (1956), quoted above, speaks of the linguistic system in our mind and similarly Kambartel conceptualises our thinking as bounded by the existing grammar. While our thinking and communicating is certainly very similarly conditioned by the linguistic system there are some differences, which we need to focus on in order to explore possibilities of stretching our grasp of the world.
As Kambartel and others have pointed out our linguistic system changes over time: some linguistic categories disappear while new ones are integrated into the system; established relationships between categories are broken up and replaced by new ones. In this way the linguistic system allows for new conceptualisations while other ones might become excluded. We might now hypothesise that the linguistic system guiding our thinking and communicating might be developed at different speed in the two spheres. For individuals it is much easier to 'experiment' in their thinking with new categories than to use new categories in their communication with others, since 'successful' communication presupposes that the participants are prepared to take on the new categories used (cf. Bateson 1972: 406/7). In other words, while changes in the 'grammar' used in our individual thinking is merely restricted by our individual mind, changes in the 'grammar' used in our communication is restricted by multiple minds, i.e. by the minds of all participants of the communication. In addition to the individual inclinations of accepting or rejecting certain categories the specific social setting often puts further restrictions on the communication. Formal organisations are in this respect particularly restrictive. As many organisation theorists have pointed out the very essence of organising is the 'reduction of variety' (Weick/Westley 1996); organising means the reduction of equivocality (Weick 1979); the organisational context determines acceptable ways in which to conceptualise the different aspects of the world, while excluding alternative possibilities. This phenomenon has also been described as 'uncertainty absorption': organising means absorbing the uncertainty about the ways of interpreting (aspects of) the world (Luhmann 2003; see also March/Simon 1958: 165). As such the organisational context is likely to be extremely slow in allowing changes to the linguistic system used in organisational communication. For members of the organisation it is particularly
difficult to transfer changes in their 'grammar' of thinking to the level of communication – more difficult than for example in an artistic discourse. To be sure the organisational context affects not only communication but also thinking; nevertheless it can never determine it entirely. As such the members will always experience more flexibility in their thinking than in their communication.

Pulling these arguments together we can say that the individual minds of all members taken together possess a much greater potential for conceptualising (aspects of) the world in new ways; this is particularly so considering that different members might develop the 'grammar' of their thinking in different ways, i.e. the minds of the different members taken together constitute a 'pool' of different ways of developing the linguistic system. Due to the restrictiveness of the communication only a small part of these can be realised in the organisational communication: the members' minds encompass a much greater pool of novel categories than the organisational communication. In other words, the communicative categories are only a subset of the cognitive categories.

The pool of cognitive categories of the organisational members, however, is itself only a subset of all the categories that exist within and outside the organisation. In other words, outside the organisational context there are other individuals, i.e. non-members, with slightly different linguistic systems; there are also other social contexts in which other communicative categories are available, e.g. in artistic discourses there are other categories available than to the organisation. In Figure 1 the three sets of linguistic categories have been represented graphically.
Figure 1: Sets of linguistic categories

We summarise our argument so far. Strategic foresight is possible only to the extent that future developments can be captured within the presently given linguistic categories. Thus, in order to be able to grasp 'grammatically' new situations the present grammar would need to be 'stretched'. We argued that while individual members might 'experiment' in their thinking with new linguistic categories, the organisational setting due to its specific characteristics is likely to prevent most of these new categories from being used in communication. As such the organisation slows down the development of its linguistic system. In order to increase the ability of strategic foresight it would thus be necessary to counteract this tendency: organisations would need to encourage the transfer of new cognitive categories to the communicative domain. This can be done, as we will argue in the following, by encouraging new modes of reasoning: anticipating criticism and occasional reason.
2. The concepts of anticipating critique and occasional reason

In this section we want to introduce and explain the philosophical concepts of anticipating critique (Paul Feyerabend) and occasional reason (Helmut Spinner) in their original context before transferring them to the question of organisational foresight in the ensuing section.

Feyerabend's concept of anticipating critique

Feyerabend developed his concept of anticipating critique in the context of the philosophy of science. He argued that scientific reasoning traditionally has been based on the idea of pre-given, independent criteria. Accordingly, scientific statements are expected to be substantiated with, and evaluated on the basis of, such criteria. These independent criteria determine the extent to which statements are seen as 'rational'; since “rationality means: agreement with particular general rules and standards” (Feyerabend 1980: 27, our translation).

However, as Feyerabend demonstrated such independent criteria do not and cannot exist. He thus criticised particularly the rationalists in the tradition of Karl Popper (cf. e.g. Feyerabend 1980; 1982). With his historical reconstructions of the sciences Feyerabend showed that if scientists had followed such general rules as the rationalists assumed (e.g. consistency, the methodology of deduction) the progress in the sciences would never have happened. He thus points out that all rules and all methodologies “have their limits” (Feyerabend 1975: 32). This does not mean that one should do away with all rules and create a complete anarchy in the sciences. It rather means that one needs a realistic and thus relativistic way of handling such rules. In line with this observation Feyerabend concludes that it is often rule refraction rather than rule following that leads to progress in sciences (Feyerabend 1975: 23).
This is the particular context in which Feyerabend developed his concept of anticipating critique. With this concept he argued for a new mode of reasoning according to which the criteria of criticism (of an argument) need not be pre-given but could be developed in the process of criticism itself. Feyerabend explains:

In the following I will call *anticipating criticism* (description, suggestion, etc.) a criticism (description, suggestion, etc.) which is based on criteria not existing yet; and I will call *conservative criticism* (description, suggestion, etc.) a criticism (description, suggestion, etc.) which accords with existing criteria. Anticipating criticism always appears somewhat awkward and it is easy for conservatives to prove its absurdity.

(Feyerabend 1980: 47; our translation; original emphasis)

Thus, rather than basing one's arguments on existing criteria, one bases it on criteria that are yet to be developed. It is more of an intuitive mode of reasoning in which the categories for substantiating the argument can be merely vaguely 'sketched' but not clearly explained; one can only hint at the kind of categories that one would need to develop in order to properly clarify the argument. Feyerabend explains this new mode of reasoning by contrasting it with the conventional one:

“Arguments, theories, terms, points of view and debates can [...] be clarified in [...] two different ways: (a) in [a] manner [...] which leads back to the familiar ideas and treats the new as a special case of things already understood, and (b) by incorporation into a language of the future, which means *that one must learn to argue with unexplained terms and to use sentences for which no clear rules of usage are as yet available.*”

(Feyerabend 1975: 256; original emphasis)
To make this contrast more explicit: The conventional mode of reason remains within the context of the established categories and thus treats everything as merely a variation of the known; as such it excludes any type of argument that can't be captured within this established context – thus excluding radical novelty. The mode of the anticipating critique, in contrast, allows for radically new arguments as the 'appropriate' context for the argument is developed in the course, and as part, of the argument. Thus rather than discussing novel ideas within a known context as (a variation of) something already known, they can be treated as something as yet unknown within an as yet unknown context. Anticipating critique, hence, does not mean doing away with the necessity of substantiating ones arguments and of placing them in a context on the basis of which they may be evaluated, it only encourages a different kind of substantiation and a different kind of context.

The difference between the conservative and the anticipating critique can also be seen by looking at the temporal relation between the argument and its substantiation or context (see Figure 2). In the case of the conservative critique the categories for substantiating the argument precede the argument. In Figure 2 we have symbolized the argument itself with the circle and the categories that are drawn upon for the substantiation with squares. If the argument takes place in \( t_0 \) the categories for substantiating the argument must have been developed in \( t_{-1}, t_{-2} \) etc.. In the case of the anticipating critique the temporal relation is reversed: the argument precedes the categories for substantiating it. Thus, if the argument is made in \( t_0 \) the categories for substantiating it are developed in \( t_1, t_2 \) etc. This, however, also means that at the time the argument itself is made it cannot be properly evaluated as the substantiation of the argument is not realised as yet. One could say the argument is held in suspense.
The type of reasoning implied by the anticipating critique puts the participants of the discourse under particular strain. They are expected to (provisionally) accept an argument pending its substantiation and its integration into a context from which it can properly be grasped. In other words, the participants should (provisionally) accept the argument without even adequately understanding it. Feyerabend acknowledges the difficulties associated with this. He illustrates the situation of the participants to such a discourse with an example from John Stuart Mill, in which a father has a discussion with his little son on logics. The son accepts the arguments of the father although he doesn't really understand them at the time; only retrospectively he is able to properly appreciate what his father said. Feyerabend quotes the son's later reflections on the discussion:

“The explanations did not make the matter at all clear to me at the time; but they were not therefore useless; they remained as a nucleus for my observations and reflections to crystallise upon; the import of his general
remarks being interpreted to me, by the particular instances which came
under my notice afterwards.” (Feyerabend 1975: 257)

This example isn't, of course, about anticipating critique in the proper sense since the
arguments were based on pre-existing categories (context). However, from the
perspective of the son the situation is very similar to that since for him the context was
developed only afterwards; he didn't share the context from the beginning.

Feyerabend argues that the sciences could benefit immensely if such new modes of
reasoning were more accepted. The traditional mode of reasoning in the sciences with its
blind adherence towards intersubjectively shared criteria stifles its development. As such
he sees his concept of anticipating critique as merely one new form of reasoning in a
more general move towards liberation from the strict rules of the traditional scientific
discourse. In this sense he writes:

„Intelligent humans do not adhere to criteria, rules or methods, not even to
'rational' methods; they are opportunitists, i.e., they use those mental and
material tools which in a given situation seem most likely to serve their
aims.” (Feyerabend 1980: 9; our translation)

This quote from Feyerabend leads us directly to Spinner's concept of occasional reason,
in which the concrete situation rather than general rules or categories are taken as the
ultimate point of reference for an argument or action.

**Spinner's concept of occasional reason**

Helmut Spinner developed his concept of 'occasional reason' mainly in confrontation
with the ideas of Karl Popper and Max Weber (Spinner 1977; 1982; 1994). He criticized
the one-sided view of rationality of the Western world which treats only a specific mode
of action as rational banishing all else as 'irrational' (Spinner 1994: 24-25). According to these conceptions arguments or actions are only rational to the extent that they can be subsumed under some general principles, e.g. the economic principle or Kant's categorical imperative. For Spinner, however, this isn't the only form of rationality. He contrasts this traditional 'principle-based' rationality with another form of rationality, which he terms 'occasional rationality' or 'occasional reason'. Every human being usually possesses both of these forms of reason; and everyday action always represents a combination of both in different combinations. Spinner in this sense also speaks of 'double reason' (Spinner 1994). Spinner characterises the principle-based rationality as follows:

"[F]ollowing the Weberian model of the occidental rationalism, there is the standard concept of the norm-bound, rule-led "principle-based reason", which manifests itself in general, abstract, anticipating (...), person-independent and situation-independent criteria for principle-based rational thinking and acting, seeing and feeling, wishing and deciding – according to principles & rules: in principles (therefore its name), norms, rules, maxims, methods, doctrines and other idées générales, which apply to all cases of the same kind and which should lead to general problem solutions.

(Spinner 1994: 29; our translation)

The principle-based reason is subject-independent and its nature is dogmatic. It consists of trans-individual and trans-situational principles which everybody is supposed to follow. The principles on which action is to be based precede the concrete situation of the action; the principles 'anticipate' – or better: 'predetermine' – all possible rational actions. According to Spinner the principle-based rationality became the standard mode
of reasoning in the Western world particularly in the scientific, ethical and legal discourses (Spinner 1994: 47 and Kirsch 1985: 19).

In contrast to principle-based reason Spinner conceptualises occasional reason as a mode of reasoning which pays particular attention to the concrete occasion. As such it focuses on the surprising and the irregular. Therefore arguments or actions cannot be subsumed under general rules, traditions etc. and are thus in the traditional sense 'irrational'. Spinner himself speaks of

“(…) the alternative conceptualisation [to the principle-based reason] of an 'occasional reason', which is uncontrolled, not pre-conceived in principles and not bound to general rules. Its occasional rationality changes according to the situation from case to case: as specific means (...) without general criteria, for the occasion-rational solution for the particular individual case, without generalizing and transferring these to all comparable cases or similar problems.” (Spinner 1994: 29; our translation)

In contrast to principle-based reason occasional reason does not presuppose trans-situational principles according to which the individual may orient itself in a concrete situation. According to occasional reason every situation is taken to be unique and not directly comparable to any other situation. As such any trans-situational principle or rule would ignore the idiosyncracies of the situation; and is thus seen as inadequate. Hence, any arguments or actions are determined by the temporary logic of the concrete situation. This puts particular emphasis on the way that the individual experiences the concrete situation he/she is in. Due to their different personalities and backgrounds different individuals might experience the same situation differently. As such different individuals can be expected to display differently orientations in the same situation.
Thus, while the principle-based reason assumes a trans-situational and trans-individual logic the occasional reason is based on a situational and individualistic logic. These two forms of orientation, as should have become clear, are very different and have very different implications for the way problems in a particular situation are conceived and solved (Spinner 1987: 37).

**Hypotactic and paratactic styles**

Feyerabend's and Spinner's modes of reasoning are closely associated with the way the cognitive categories are organised and presented; i.e. with the way that the categories are held in store and the way that the categories are presented in the concrete communications. They speak of different (cognitive and presentational) 'styles'. These styles have a significant influence on our thinking and communicating. For example, if two categories are treated as closely connected rather than independent one tends to use them in combination; i.e. if one uses the one category one is very likely to use also the other. As such the cognitive style creates dispositions for particular ways of thinking and communicating rather than other ones. Spinner in this sense writes:

"[C]ognitive styles are not a question of truth and method, in the sense of the validity of specific conclusions or procedures. It rather concerns cognitive dispositions and tendencies for distinctive, particular forms of thinking and representing [...]. (Spinner 1994: 87, our translation)

Feyerabend and Spinner ultimately distinguish two types of cognitive styles: the hypotactic and the paratactic style (Feyerabend 1975: 223.; Spinner 1987: 40-44.). The hypotactic style refers to a way of organising cognitive categories in some sort of hierarchical way. The categories are systematically integrated with regard to each other,
forming a kind of theory. In this sense Spinner also speaks of a 'theoretical' style. There are clear-cut relations between the different categories. If a new category is added to the stock of existing categories it needs to be fitted into the system of categories; its relation to the other categories need to be clearly defined. Thus, the relations between the existing categories put restrictions on how new categories can be added. As such every category is a category in a clear-cut context of other categories. Thus, if one draws on a particular category in one's thinking or communicating one automatically draws on the other categories to which the category is linked.

In contrast to the hypotactic style in the case of the paratactic style the different categories are not strictly related to any other categories. They are rather treated as independent categories leaving open the possibilities of connecting them to other ones. Thus, contrary to the hypotactic style where the meaning of the category to a large extent is defined through its relation to other categories, in this case the categories are treated as autonomous and 'self-defined'. As such, the different categories are kept standing next to each other without any kind of integration. The categories held in store do not form a consistent whole but merely an aggregate of autonomous categories which are organised sequentially. This also means that new categories can simply be 'added' to the stock of categories without having to be integrated and related to the other one – in this sense Spinner also speaks of an 'additive' style (Spinner 1994: 89). Because of that this style is also much more open to the incorporation of new categories. Thus, when drawing from a stock of paratactically organised categories in one's thinking and

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1 To be precise, Spinner uses different terminology for the cognitive style and the presentational style: He refers only to the presentational styles as 'hypotactic' and 'paratactic' and to the cognitive styles as 'theoretical' and 'additive'. In order not to make the text too complex we will stick with Feyerabend who uses the same terminology for both.
communicating one can pick out individual categories without having to draw on a bulk of other categories to which they are connected.

Closely connected to the hypotactic and paratactic styles of holding categories in store are the styles of presenting or using the categories in thinking and communicating, i.e. the presentational style. In the case of the hypotactic style of presentation the different categories drawn upon are used in a highly integrated way; every category reflects the way it relates to other categories. In the paratactic style, in contrast, the categories are presented as autonomous and just sequentially structured. Accordingly everything is expressed as a sum of 'details' which are shown in their own right without any connection apart from their simultaneousness and their same location (Spinner 1994: 89-92; Feyerabend 1975: 235-236). According to Feyerabend and Spinner these two styles are characteristic for different cultural epochs. The paratactic style for example can be found in the Archaic Greek culture, while our modern Western culture is dominated by hypotactic styles. Feyerabend illustrates these two styles by comparing pictorial representations in different epochs. He gives the example of a scene in which a lion attacks a little kid. Hypotactically presented the picture would present lion and kid with regard to each other: The kid would look terrified in expectation of the lion's attack and the lion would be shown in its superiority over the kid. In the paratactic style the scene would be presented very differently as Feyerabend describes:

“The lion looks ferocious, the kid looks peaceful, and the act of swallowing is simply tacked on to the presentation of what a lion is and of what a kid is. (We have what is called a paratactic aggregate: the elements of such an aggregate are all given equal importance, the only relation between them is sequential, there is no hierarchy, no part is
presented as being subordinate to and determined by others.) The picture reads: ferocious lion, peaceful kid, swallowing of kid by lion.”
(Feyerabend 1975: 233-234)

Thus, in contrast to the hypotactic style the different elements of the picture do not refer to each other. The relation between the elements is itself an element which is added to the other elements. As such each element could be taken out and replaced by something else without affecting the presentation of the other ones. Even the relation between the lion and kid could be reversed without having to change anything in the presentation of lion and kid themselves. In other words, the element 'swallowing of kid by lion' could be replaced by 'kid biting lion' without having to change anything about the presentation of the lion or kid. In a hypotactic style, in comparison, such a change would require modifications to all elements of the picture.

According to Feyerabend and Spinner these two (cognitive and representational) styles are more or less directly associated with their different modes of reasoning: the hypotactic style is connected with the conventional modes of reasoning (i.e. conservative critique and principle-based reason) and the paratactic style with their 'unconventional' modes (anticipating critique and occasional reason). Although not completely impossible, the reversed combinations are rather unlikely (Spinner 1987: 37). Anticipating critique and occasional reason are the easier to accomplish the greater the degrees of freedom of combining categories and the easier the integration or addition of new categories to the already existing ones.
3. Modes of reasoning and strategic foresight

In the following we will discuss the implications of Feyerabend's and Spinner's ideas with regard to the limitations of strategic foresight identified in the first section. Although neither author wrote in the context of Organisation Studies we would nevertheless argue that their original context is closely related to it: Spinner, on the one hand, was concerned with a philosophical theory of rationality. Due to the important role that rationality plays in organisations the relevance of his concepts should be obvious. Feyerabend, on the other hand, was mainly concerned with the philosophy of science and the way in which scientific 'truths' are generated. Scientific and organisational discourses, however, share a strong emphasis on the substantiation of any action or argument. In the same way as scientific statements need to be supplemented with evidence for its validity in order to be accepted as 'scientific' statement, organisational communications (usually) need to be justified in order to be accepted as decisions. In both cases the discourses usually refer back to earlier scientific statements or earlier decisions in order to substantiate the current argument – in line with what Feyerabend described as conservative critique.

Going back to our analysis in the first section there are two points which are of particular relevance for an organisation's ability of strategic foresight: (1) the members' propensity for developing new cognitive categories or for accepting new categories from outside and (2) the probability of the members' cognitive categories for becoming available as communicative categories in the organisation. Feyerabend's and Spinner's modes of reasoning are of direct relevance to both of these points.

As Feyerabend and Spinner pointed out, in our Western culture our thinking is dominated by a hypotactic organisation of cognitive categories. Our cognitive categories
are usually relatively tightly integrated into a system of other categories. This, as we argued above, restricts the absorptive capacity with regard to new categories. As such we might expect individuals to be the more open towards experimenting with new categories the less hypotactically and, thus, the more paratactically they organise their cognitive categories. People who 'store' their ideas sequentially are more likely to accept new categories even if the relation to the other categories is not defined or if they seem incompatible. The propensity of organising the categories more hypotactically or paratactically probably depends on the one hand on the individual psychic dispositions – see in this respect particularly the theory of cognitive types (Maruyama 2003). On the other hand it is probably to a large extent determined by the social context into which the individual is integrated (cf. Berger/Luckmann 1967). Thus, the more paratactically organised the organisational communications (see below) or the member's other extra-organisational communications are, the more likely the member is to organise his/her mind in such a way. As such organisations might increase the likelihood of members' developing new cognitive categories by 'encouraging' a more paratactic organisation of their mind or by selecting members with accordant dispositions. However, to what extent organisations are really able to (indirectly) influence their members' style of thinking has to be left open here. In the following we rather want to concentrate on the second point, i.e. the extent to which new cognitive categories become available as communicative categories.

In the first section we argued that the members of an organisation tend to develop their cognitive grammar faster than the communicative grammar changes; as such they might be able to think about certain radical changes in the environment long before they can communicate about them (cf. Tsoukas/Chia 2002: 580). As such organisations are the
more foresightful the more they allow for such cognitive categories to be used in
communication. A significant obstacle to the use of new categories in communication is
the prevailing hypotactic style of organisation and presentation: new categories need to
be fitted into the system of already accepted categories before they can be legitimately
used. Because of that, radically new ideas, which are the most interesting ones in our
context, tend to be rejected in the communication. Organisations tend to accept only
those categories that fit the existing categories and as such tend to perpetuate the
established grasp of the world – a phenomenon comparable to what has been described
as 'cognitive dissonance' (Festinger 1957). Different organisations, however, differ in
their communicative styles. While a 'pure' paratactic style is certainly very unlikely, one
nevertheless can find different combinations of paratactic and hypotactic styles. As such
one might find parts of the communicative categories in a hypotactic arrangement while
other ones are paratactically ordered. It could also be that the hypotactic ordering of
categories is not very strict, allowing for variations in the relations. Organisations might
also actively encourage more paratactic styles of communication – for example through
the design of its structures. E.g. heterarchical structures (McCulloch 1965) or loose
coupling between different parts of the organisation (Weick 1976) might contribute to a
style of communication in which 'incompatible' ideas are tolerated to stand side by side.
Ultimately, however, it is probably a question of the organisational culture to what
extent the communicative categories, concepts, ideas etc. are organised as a consistent
whole or whether inhomogeneity and inconsistencies are tolerated.
We may now argue that the more paratactically the communicative categories are organised, i.e. the less the categories are integrated into a consistent system of categories, the easier it is for members to draw on new cognitive categories in the communication. In other words, the more paratactic the communicative style the more cognitive categories become also potential communicative categories. In Figure 3 we have tried to represent this idea graphically: we distinguish between the set of cognitive categories available in the communication in case of a more hypotactic and a more paratactic style. With the two arrows we have indicated that the more paratactically the communication the more cognitive categories become available in the communication. Thus, if individual members develop new cognitive categories – which might be able to better capture new developments in the world – he/she is more likely to be able to use them in the communication with other members, even if the relation to other commonly
shared categories is not clearly defined or if the new categories are inconsistent with them.

The paratactic communicational style, however, is not enough for an organisation for accessing its members' new cognitive categories in order to significantly 'stretch' its grammatical boundaries. The paratactic style needs to be paired with particular modes of argumentation. New cognitive categories cannot be 'adequately' communicated in the conventional mode of reasoning, where the arguments are to be based on the established categories. They rather require alternative modes of reasoning which do not squeeze them into established contexts but allow them to 'unfold' appropriately. Anticipating critique and occasional reason, as explained above, are two modes of reasoning that allow braking with the established 'grammatical rules' developed in the past and instead presenting novel ideas in novel contexts. The important point – particularly with regard to the organisational context – is that these two modes of reasoning do not do away with the need to justify an argument and as such are compatible with the requirement in organisation to substantiate one's arguments.

Feyerabend's anticipating critique is more or less explicitly dealing with ways of stretching the established communicational grammar. New ideas (categories) are to be allowed into the communication even if the appropriate context for it is not developed, yet. In this mode of reasoning the substantiation of the argument is just vaguely sketched out and left to the future to be concretised. To the extent that organisations cultivate such a mode of reasoning – in addition to its conventional mode – the organisational members are put in a position to communicate about their individual grasp of new developments in the world even if this is incompatible with the shared worldview. As such new categories can gain access in the organisational communication with their substantiation
in (yet to be developed) contexts pending. In this way the organisation might go beyond the boundaries of what the established, i.e. inter-subjectively shared, linguistic system allows it to conceptualise. In addition to that the fact that the substantiation is pending might add an additional dynamic to it, encouraging the members to develop (first cognitively and then communicatively) new categories to make up an appropriate context.

Similarly to anticipating critique, occasional reason is a mode of reasoning in which arguments need not be based on the established communicative context. In contrast to the former, however, occasional reason is not explicitly focussed on the future but rather on the very present. The particular context for substantiating one's arguments or actions is the particularity of the very situation in which the argument or action takes place. This focus on the presence, however, ultimately is not very different from a focus on the future. As several authors have pointed out (e.g. Tsoukas/Shepherd 2004; Chia 2004) foresight at its very heart has to do with an attention to the very concrete present situation. In this sense the occasional reason's attention towards the particularity of the concrete situation in its own right (and not merely as variation of earlier situations) can also be understood as attention towards new developments. Where principle-based reason tends to downplay differences between situations, occasional reason tends to highlight them.

As described above, occasional reason puts particular emphasis on the personal experience of the concrete situation. In contrast to principle-based rationality occasional reason acknowledges that different individuals might experience the same situation in different ways. Thus, to the extent to which this mode of reasoning prevails in the communications the organisational members are encouraged to present accounts of their
idiosyncratic experiences. They can expect the other participants to display a certain openness to these idiosyncratic accounts, even if they might not be able to comprehend them immediately on the basis of their own experiences. As such organisational members might also talk about novel perceptions of the world introducing their novel cognitive categories into the communication. In this way the individual (cognitive) developments of the linguistic system gain access to the communicative realm.

Analogously to the mode of anticipating critique the occasional reason assumes that the context for such arguments is developed in the course of the argument itself; in this way one is able to free oneself from the established categories without having to do away with the substantiation entirely. In contrast to anticipating critique, the substantiation for the argument isn't, however, deferred into the future but rather developed from the concrete situation. This requires assembling the linguistic categories in a way that suits the idiosyncrasies of the situation. This might even call forth the development, or integration into the communication, of further novel categories. In other words the arguments are substantiated on the basis of a situation-specific logic.

Arguments made in the mode of anticipating critique or occasional reason require a particular style of presentation – above we referred to this as paratactic style of presentation. In the case of communications these take the form of narratives; one is expected not to present a 'theoretical' argument with clear-cut relations between its elements but rather to tell a 'good story'. As such, the central criterion for one's presentation is not its inter-subjective verifiability – which wouldn't be possible in the type of communications described above – but rather its particular kind of believability (cf. Gioia/Manz 1995). Bruner writes about this believability:
"Believability of a story is of a different order than the believability of even the speculative parts of physical theory. If we apply Popper's criterion of falsifiability to a story as a test of its goodness, we are guilty of misplaced verification." (Bruner 1986: 14)

The believability of such a story, and thus the likelihood of it being accepted by other members, depends on the internal coherence of its different elements. This, however, is not enough. In addition to internal coherence the narrative has to come across as *authentic* expression of the speaker's experiences. In terms of Habermas (1984) the central validity claim connected with the story is not a kind of verifiable truth but its authenticity. In this mode of communication narratives are accepted by other participants to the extent that the narrator is felt to express his real intentions and beliefs.

The narrative mode of communication with its focus on authenticity as relevant validity claim allows for anticipating critique and occasional reason in the communication and as such removes some of the barriers to the transfer of new cognitive categories to the communicative domain. In this way the organisation's linguistic system might adjust sooner to changes in the world increasing its ability of strategic foresight. Nevertheless, there can be no doubt that this openness towards new ideas implied by such modes of communication make the organisation also vulnerable to irrational and 'thoughtless' behaviour. As Feyerabend (1980: 47; footnote 15) pointed out, in these modes of communication it is hardly possible to distinguish between 'ingenious insights' and incompetence.

**Conclusion**
In this paper we have argued that most current approaches to strategic foresight are limited by too simple a concept of future. As we tried to show, it is usually assumed that one is able to conceptualise already in the present all possible future developments. Against this view we presented a concept of a 'radically open future' according to which the world might change beyond of what our cognitive categories allow us to conceptualise. As an example for such a change we referred to the development of the world wide web at the beginning of the 1990's.

Drawing on linguistic philosophy we tried to explain how our thinking and communicating is restricted by our linguistic system. This we described with Kambartel's concept of the 'grammatical boundaries'; the current linguistic system allows us to conceptualise a wide array of different things but it excludes the conceptualisation of other ones – lying outside its grammatical boundaries. Based on this concept we argued that in order to be able to grasp radically new developments in the world an organisation needs to await the 'adjustment' of its linguistic system. Thus, the faster the development of the linguistic system the more foresightful the organisation is.

We went on to argue that individuals usually develop new linguistic categories in their thinking fairly early on but are not able to use them in their communications. As such individuals are often able to grasp fundamental changes earlier than can be communicatively realised. From this we inferred that organisations could increase their ability of strategic foresight to the extent that they were able to allow new cognitive categories of their members into the organisational communications. This, however, requires a different mode of reasoning.

Drawing on Feyerabend and Spinner we introduced anticipating critique and occasional reason as two modes of reasoning which allow the use of novel cognitive categories in
the communication. In other words, they make possible the introduction of linguistic developments in the members' mind into the realm of communication. The important point about these modes of reasoning is that they allow for different forms of substantiation of one's arguments. While in the traditional mode of reasoning it would be very difficult to integrate radically new conceptualisations into the organisational communication as the existing categories would be inadequate for substantiating them, anticipating critique and occasional reason assume that the context of substantiation is itself developed as part of the argument.

We explained that these two modes of reasoning are usually associated with a particular style of organising the linguistic system. In this sense we distinguished between a hypotactic and paratactic style. According to the latter cognitive categories are not integrated into a hierarchical order in which the different categories are put into a clear-cut relation to each other. They are rather sequentially arranged allowing for multiple combinations. This provides the linguistic system with the necessary flexibility and openness with regard to novel cognitive categories.

On the whole we have tried to argue for a new conceptualisation of strategic foresight, which implies a particular focus on different modes of reasoning. We have shown that Feyerabend and Spinner can offer valuable insights in this respect. It has to be left to further research to find out what other suitable concepts of reasoning there are.
References


Ansoff, H.I. (1975), 'Managing Strategic Surprise by Response to Weak Signals', in: California Management Review, 18, 1975, 2, pp. 21-33


Festinger, L. (1957), A Theory of Cognitive Dissonance, Evanston 1957


Knight, F.H. (1921), *Risk, Uncertainty and Profit*, New York 1921


