

The semantics of “empty prepositions” in French¹

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1. Introduction

In 1921, the French grammarian Vendryes characterized French prepositions as “mots vides” or empty words. “Empty” for Vendryes was a convenient metaphor for saying that these words were “abstract”, which, in the context of his discussion, apparently equates with “grammatical”. Vendryes was heavily influenced by Meillet (1912), who distinguished between *mots principaux*, “principal” or lexical words, and *mots outils*, or function words, i.e. grammatical words. Since Vendryes’ time, many linguists and grammarians have been intrigued by the problems of accounting in a general way for the occurrence of prepositions in particular contexts where they appear to lack the ordinary lexical meanings associated with them.

One set of problems in French is posed by the occurrence of different prepositions in similar and semantically parallel constructions.² In particular, the two most frequent prepositions, *à* and *de*, often appear in similar syntactic contexts, but in a distribution that seems entirely arbitrary. Infinitive complements, for example, may be introduced by either *à* or *de*. In some instances, the prepositions in a construction differ depending on the choice of the main verb, as in *chercher à comprendre* ‘seek to understand’ and *essayer de manger* ‘try to eat’. In other cases, the same verb may appear with either of the two elements, as in the expressions *commencer à marcher* and *commencer de marcher*, both glossed ‘to begin to walk’. Particularly in connection with infinitives, the complexity of distribution of *à* and *de* is so great that normative books are published for the general public on the topic of when to use which preposition.³ In noun phrases also, both *à* and *de* can be used to link the head noun with modifying elements; for ex-

ample, we find phrases like *moulin à café* ‘coffee mill’ and *ville de Paris* ‘city of Paris’. What makes all of these cases problematic is the lack of obvious and easily characterizable differences in meaning between the prepositions such as are found with contrasting expressions like *aller à Paris* ‘go to Paris’ and *venir de Paris* ‘come from Paris’.

A number of European structuralists adopted Vendryes’ notion of empty prepositions as part of their overall analyses of the French prepositional system (e.g. de Boer 1926, 1933, Tesnière 1953). Although these linguists differed as to which prepositions, or uses of prepositions, were to be considered as empty, they shared a conception that differed noticeably from that of Vendryes. For one thing, whereas Vendryes was rather equivocal about whether his “abstract” elements had any measure of meaningfulness, the structuralists took the notion of emptiness to mean complete absence of semantic content. De Boer (1933: 125), for example, refers to certain prepositions as “signes absolument vides, et, par là, incapables de préciser.”⁴ Secondly, Vendryes, like Meillet, did not assume a sharp distinction between “full” and “empty” words, but allowed for different degrees which corresponded with stages in a diachronic process (Meillet’s “grammaticalization”): “...plus il s’affirme comme vide, plus il augmente sa valeur abstraite (Vendryes 1921: 201).”⁵ The structuralists, on the other hand (and grammarians influenced by them, e.g. von Wartburg and Zumthor 1958: 359) tended to assume a two-way contrast between “full” and “empty” (or “colorless”) elements.⁶

Two linguists writing after the midpoint of the century took issue with the notion of semantically empty prepositions as it had been applied in the literature, namely Georges Gougenheim and Bernard Pottier. Gougenheim (1959) and Pottier (1962) pointed out how poorly justified this concept had been, and showed that no suitable criteria for its application had ever been offered.⁷ Gougenheim established a number of important generalizations about the distribution and semantics of *à* and *de* (among other prepositions) which, for him, limited the applicability of the notion of empty prepositions to a few uses of *de*. Pottier (1961) elaborated on Gougenheim’s observations, and Pottier (1962) introduced a comprehensive theory of the semantics underlying prepositions that unequivocally rejects the existence of empty prepositions.

Gougenheim’s and Pottier’s arguments for the semantic content of prepositions in expressions where their meaning was not obvious or easily statable were never explicitly countered. The full/empty distinction, however, received a new lease on life with the appearance of generative grammar on the linguistic scene. Generative theory reiterated the (American) structuralist claim that grammatical patterns can (and should) be described independently of any considerations of meaning; structural principles were all that were deemed necessary to account for grammatical structure.⁸

In the literature on prepositions in French generative linguistics, we find explicit denials of the meaningfulness of certain prepositions or uses of prepositions. For example, Ruwet (1982: 321) refers to the preposition *à* as a “simple marqueur de subordination, qui ne contribue pas à l’interprétation semantique.”⁹ Along similar lines, Gaatone (1976: 15) states:

On sait cependant que de nombreuses prépositions sont dans certains contextes, de purs éléments grammaticaux [...] Sur le plan synchronique, ces prépositions, entièrement conditionnées par le contexte et ne contribuant donc en rien au contenu des énoncés bien qu’indispensable à leur structure, sont à distinguer nettement des prépositions “pleines”, résultant d’un choix libre dans le cadre d’un contexte donné et commutables dans ce contexte avec d’autres prépositions (*la lettre est dans/sur/sous ... le livre*).¹⁰

In the above passage, the declaration of lack of semantic content of certain prepositions is coupled with a further distinguishing feature, namely that such prepositions are required in a given context, unlike meaningful prepositions which are said to be the result of a choice among elements. The assumption of the incompatibility of meaningfulness with obligatoriness that is presupposed here is made explicit by Lyons (1968: 418) as follows: “any linguistic element which occurs in an utterance has meaning only if it is not completely determined (‘obligatory’) in that context” (emphasis in original). It is rare to find this assumption explicitly stated, much less justified (Lyons, for example, does not attempt to justify it, but merely calls it “intu-

itively satisfying”, p. 423). Yet it is an assumption that has functioned, with greater or less obviousness, in linguists’ argumentation from the early transformational grammar period to the present day.¹¹

Insofar as this assumption is given credence by generative linguistics, the generative view of prepositions entails recognizing the existence of two kinds of prepositions: the non-obligatory ones, which have meaning in addition to their syntactic function (as for example in *above the table*, *venir à Paris*), and those that are obligatory and hence meaningless, serving only the purposes of grammar (*the destruction of the city*, *commencer à manger*, etc.). This view, therefore, is in essential respects a continuation of the structurally-oriented French grammarians’ notion of “empty prepositions”, with no firmer justificational basis than before.

In recent years the trend in generative grammar has been to allow semantics an ever-increasing role in the determination of grammatical patterns (cf. the introduction of thematic roles in many syntactic theories). However, since the focus of generative theory remains on providing syntactic accounts for grammatical phenomena, invoking semantics supplementally and only where absolutely necessary, it is to be expected that little attention has been paid within this general framework to determining the extent of the effects of semantics on the patterns of distribution of prepositions in grammatical constructions.

This paper is a contribution toward demonstrating the existence and systematicity of those effects. Specifically, our goal is to show that semantic properties of *à* and *de* motivate their occurrence in one particular set of constructions in which their semantic content is not obvious, namely those in which the preposition introduces an infinitive complement. Our analysis will enable us to account for synchronic and diachronic observations about the distribution of *à* and *de* that have previously either resisted satisfactory treatment or have simply gone unnoticed. Our paper also has the aim of disputing the often tacit assumption, still quite widespread among linguists, that if an element is obligatory, its presence cannot therefore be semantically motivated.

These aims are necessarily limited; we make no attempt to provide an exhaustive description of the distribution of *à* and *de* in French.¹² Nor is it our purpose to investigate the grammatical properties of these prepositions in their various functions. The latter is an important ob-

ject of investigation, but is not directly relevant to our concerns.¹³ Our study integrates the assumptions and methods of Cognitive-Functional linguistics (Langacker 1987, 1991; Givón 1984, 1991), which assumes that grammatical structure is based in meaning; and those of what might be termed grammaticalization theory (Lehmann 1985; Traugott and Heine 1991, Introduction; Bybee *et al.* forthcoming) which holds that grammatical elements cannot be fully understood without an understanding of the diachronic processes they are undergoing.¹⁴

Our procedure in the paper will be to start with some basic facts involving the distribution of *à* and *de* before infinitives, first considering synchronic, then diachronic facts (Section 2). In Section 3 we consider cases in which *à* and *de* uncontroversially serve a semantic function, and provide a basic sketch of their core meanings. In Section 4 we treat a set of cases that are in particular ways intermediate to the two other sets of cases discussed, and show that there is in principle no dividing line that can be drawn between meaningful and meaningless uses of the prepositions. We show that the uses of pre-infinitival *à* and *de* are entirely compatible with the core meanings of these prepositions as established in Section 2; they are in fact natural extensions of more basic senses of these elements. These premises then lead to the conclusion that *à* and *de* are best considered as meaningful elements, even when they serve a maximally grammatical function such as introducing an infinitive. Section 5 sums up our interpretations of the synchronic and diachronic facts, and Section 6 concludes with a few general observations about the relation of grammar and meaning.

2 Types of phenomena

In this section we first consider the synchronic situation in Modern Standard French with regard to the distribution of *à* and *de* in infinitival constructions, and then discuss some diachronic aspects of the problem. The data introduced here will be discussed in Sections 4 and 5.

The terms “construction” and “expression” require some clarification, as we will be making reference to these notions in the course of our exposition. We refer to an abstract syntactic pattern as a “con-

struction” (e.g. N Prep N, V Prep Infinitive, etc.). (Constituency internal to the construction will be ignored here, since it is not relevant for the points we wish to establish.) Constructions are regularities that are abstracted out of linguistic usage events, specifically regularities that are maximally general. For the grammatical constructions under consideration here, this means that no specific lexical content is specified, only the grammatical categories constraining that lexical content. It is also useful to distinguish a level of subregularities in the grammar, which we call “expressions”. Expressions are phrases such as *commencer à [Infinitive]* or *accepter de [Infinitive]*, which have some specific lexical content that recurrently combines with other elements. For example, *accepter de [Inf.]* ‘agree to [Inf.]’ is an expression because it has some lexical content, and the specific lexical elements making up that content combine with, in this case, an open class of verbs that can instantiate the final unspecified slot in the construction, the infinitive. We can think of expressions as partial instantiations of a construction. Expressions of interest to us are those in which there is enough lexical content specified to identify the expression as a unique unit with its own combinatory possibilities.¹⁵

It is often easier to think about expressions if they are fully rather than partially instantiated; thus, we will often cite fully lexically specified examples, but will adopt the convention of putting lexical elements that are not relevant to the identity of an expression in brackets, e.g. *commencer de [crier]* ‘begin to [shout]’.

The most common way of introducing infinitival complements in French is with either *à* or *de*. There are a few other prepositions that occur with infinitival complements, for example *par* in expressions like *commencer par [se lever]* ‘begin by [getting up]’, although in contrast to *à* and *de*, the meaningfulness of *par* is not generally in question. There is also another pattern consisting of a verb followed by a bare infinitive (*souhaiter [partir]* ‘to wish [to leave]’). This pattern is restricted to a relatively small set of verbs taking infinitival complements, and for reasons of space will not be dealt with here.¹⁶ The following discussion is limited to expressions that contain either *à* or *de*.

Traditional French grammarians noticed the interesting fact that there are many pairs of verbs of similar semantics, one of which re-

quires *à* and the other *de*. The examples mentioned above of *chercher à* and *essayer de* are of this type. Some other examples of this phenomenon cited in Gougenheim (1959), some of which involve quite close synonymous relations, are given in (1).

- | | | |
|-----|----------------------------|----------------------------------|
| (1) | a. songer à [acheter] | 'think about, consider [buying]' |
| | rêver de [acheter] | 'think about, dream of [buying]' |
| | b. se décider à [partir] | 'decide to [go]' |
| | décider de [partir] | 'decide to [go]' |
| | c. s'offrir à [aider] | 'offer to [help]' |
| | offrir d'[aider] | 'offer to [help]' |
| | d. s'essayer à [apprendre] | 'try to [learn]' |
| | essayer d'[apprendre] | 'try to [learn]' |

These examples pose a problem for the traditional, pre-structuralist approach to grammar, with its implicit orientation towards semantic explanations for the grammatical differences found between expressions. Examples of this type lead to the obvious question: If the prepositions' use in these expressions is motivated by their semantic content, why are two different prepositions used with comparable verbs? Or, since the verbs are clearly involved in the choice of preposition, rather than vice versa, we can phrase the question as: Why, if the semantics of the verb were involved in the selection of the preposition, would two verbs of similar semantics require two different prepositions?

The examples in (1b-d) are cases of alternating pairs of expressions based on corresponding transitive and reflexive-marked verbs. In these cases the transitive verb appears with *de*, but the reflexive-marked verb, called a pronominal verb in the French grammatical tradition, takes *à*.

An important issue that arises in connection with the examples in (1), and indeed all cases of prepositions associated with particular grammatical constructions, is that of obligatoriness, i.e. whether or not the presence of one particular element in a construction or expression entails the presence of another. Compulsory presence of an element, as we saw above, is often taken as an indication that the element is meaningless. The examples in (1a) would be considered to illustrate

cases of the obligatory use of *de* and *à*, triggered by the individual main verbs of the sentence. With (1b-d), the question of obligatoriness is more complex, since the verb roots themselves do not require a particular form, but the grammatical element *se* is involved in the determination of the preposition used.

Cases of obligatoriness of prepositions are found not only in infinitival complement constructions but also in connection with expressions containing nominal objects, as illustrated in (2).

- (2) *Marie s'intéresse à la linguistique.*
 ‘Marie is interested in linguistics’.

Here, the lexical item *s'intéresser* in the V Prep NP construction requires the preposition *à*; no other preposition is possible, nor is it possible to omit the preposition. Other cases of obligatory prepositions are found in some complex nominal expressions like *ville de Paris* ‘city of Paris’ and in impersonal constructions like the one illustrated in (3):

- (3) *C'est une honte de pleurer.*
 ‘It is a shame to cry.’

There are also a large number of cases in which a particular preposition is optional in a given expression. By optional, we mean specifically that there is some choice among forms allowed in the expression. We focus here on choices between *à* and *de* in a given expression. In the infinitival construction, there are instances where the two prepositions can simply alternate, apparently in free variation. Two often-cited examples are *commencer à [écrire]* vs. *commencer de [écrire]* ‘begin to [write]’; and *continuer à [travailler]* vs. *continuer de [travailler]* ‘continue to [work]’. In each case, both alternants are accepted by many speakers, without any apparent differentiation in meaning.

In the context of a discussion of cases in which there is some choice in preposition, we can mention here also the many cases in which *à* and *de* show clearly meaningful alternations, which, as we might expect, are often associated with their more concrete, less

grammatical uses (cf. the examples *venir de [Paris]/aller à [Paris]* mentioned above).

Examining reference works of Modern Standard French to find out which verbs appear with *à* and which with *de* gives an interesting picture of the situation in Modern French. In very many cases, reference works (including ostensibly descriptive works such as Grevisse) simply disagree as to whether a given preposition can occur in a particular expression. Even where two authors both accept the possibility of two alternants, they disagree about whether there is a meaning distinction between the two (cf. discussion of *aimer à/de* in the various works). Different editions of Grevisse give different information about specific cases (see discussion of the infinitive construction in the 7th and 12th editions).

Questioning speakers about which preposition (*à* or *de*) they would use with a given verb shows a range of individual variation, and interestingly, individual speakers are aware of variation in their own speech. Many report preferences as to which of the two prepositions they would tend to use, but allow for the possibility that they would use the other. It is reasonable to assume that the variation in the speech community (i.e. variation across speakers) reflected in the reference works also represents a fair degree of variation within the speech of particular individuals. There is in any case far more variation between *à* and *de* than syntacticians have generally taken note of in the infinitive construction.¹⁷

Given this variation even among speakers at the highest education levels, in a society in which a large number of speakers attempt to follow the strict written and spoken norms of the standard language, the existence of prescriptive usage manuals on precisely this topic (cf. Note 3) is not surprising.

It is also worthy of note that where there is variation in this construction, *à* and *de* often show a skewed distribution in the speech of a given individual. Speakers report preferences in regard to which form they use; for the case of *commencer à* and *commencer de* mentioned above, for example, two speakers reported that they would tend to use *commencer à*, but that *commencer de* was perfectly acceptable and they might use it themselves. Skewed distribution is of course present

in the cases of obligatory prepositions, where the percentage of occurrence of one of the prepositions is virtually zero.

The above observations lead us to the following claim: that the cases of obligatory occurrences of particular prepositions such as those exemplified in (1a) are at the extreme end of a range of degree of alternation of *à* and *de* with infinitives. Such extreme cases are the exception rather than the norm; in most cases, infinitival expressions involve some degree of alternation.

The obligatoriness of *de* or *à* with particular verbs, the apparent interchangeability of these elements associated with certain other verbs, and intermediate to these two extremes, the wide range in degree of optionality from less to more choice with particular verbs, with or without accompanying differences in semantic interpretation, are all puzzles for a semantic analysis. We can now add the diachronic side of the picture, which will show that the occurrence of *à* and *de* has changed over time in rather interesting ways.

There are numerous instances of changes of prepositions in particular expressions in the history of French. We confine ourselves to describing changes involving *à* and *de* in the infinitive construction. Both *à* and *de* appeared in this construction to some extent already in Old French; we focus here on changes that have occurred in the last three centuries, since that is sufficient to make our point. We took our information for the modern language mainly from editions of Grevisse, and from Thomas (1956), Bénac (1956), Caput and Caput (1969) and Gross (1975).¹⁸ Our historical information comes mainly from Haase (1969) and editions of Grevisse, although the other sources mentioned also provided us some historical information.

In a number of cases, expressions that once contained *à* at a later period came to require, or at least normally occur with *de*, and vice versa. So, for example, in the 17th century we find the expression *s'attendre de* 'to expect'; *s'attendre à* does not appear to have been used, or at least did not come to the attention of Haase (1969), a very thorough description of 17th century French.¹⁹ The modern expression is *s'attendre à*; *s'attendre de* is no longer possible. The verb *consentir* 'accept, consent' is another example of this type; in the 17th century we find *consentir de* (Haase), but in Modern French only *consentir à* is given as a possibility (*Dictionnaire des Verbes*). The oppo-

site directionality is found with the verb *oublier* ‘forget’: In the 17th century, *oublier à* was used before infinitives, but now we find only *oublier de*. Similarly, *craindre à* is listed as the usual form of expression with infinitive complements in the 17th century (although Haase notes a few examples with *de*), but today *craindre de* ‘to be afraid’ is the only form sanctioned.

The changes described above could be interpreted as involving replacement of prepositions that were obligatory at one or the other stage of the language. However, it is clear on closer examination that the situation is far more complex. For example, in the account of changes involving *à* and *de* described above, we had to qualify our description with terms such as “normally occurs with”, which presupposes the notion of frequency of occurrence. In fact, it is very difficult to find a case in the earlier period of French where one of these prepositions was used to the absolute exclusion of the other. In some cases, our sources disagree as to what the norm was in the earlier period. The cases discussed above are the most clear-cut we could find, but for most, if not all, of these, there was apparently some variation in the 17th century.²⁰

Moreover, even where sources agree that a given form was the norm in the 17th century, there is often evidence of a period of transition in which both prepositions occurred, before the modern day norm was established. There are many cases where Grevisse refers to earlier periods of alternation (e.g. with *s'attendre à*), and it makes sense to assume that even for the cases that look most like replacement of one obligatory preposition by another, there was some such period of intervening alternation, given what we know about language change in general. Linguistic elements are not replaced overnight, but rather there are gradual transitions involving competing variants at a given period (cf. Heine and Reh 1984; Lichtenberk 1991).

It is notable that both the earlier and modern periods show more fluctuation than one might expect if one is looking for cases where one or the other preposition must be used with the infinitival complement. These turn out to be relatively difficult to find in either period.

The general claim these observations lead to is that there is no sharp distinction between obligatory use of a preposition and optional variation. Obligatoriness of a given form is an extreme case which is

associated with maximal grammaticalization. Only when a given form in a given expression has reached this stage will it be reasonable to refer to it as obligatory.²¹ Obligatory vs. optional, then, is a quantitative, not qualitative distinction. Investigation should not focus solely on the cases of maximal grammaticalization, since such a procedure will give a distorted, overly idealized picture of the grammatical system as a whole.

One could, of course, assume a view of language in which variation, either synchronic or across time, merely represents a kind of epiphenomenon that is external to the structure of any given synchronic grammar of a particular person at a particular time. In our view of language, however, variation within and across speakers constitutes data which must be explained and indeed, it is particularly relevant data, since it tells us something about the way the grammatical system is constructed (cf. Barlow and Kemmer 1992). Such variation is one indication that grammar is organized around grammatical prototypes, rather than discretely bounded, non-structured categories.²² Moreover, close attention to patterns of variation allows us to construct a larger, more general picture of the linguistic system than that visible solely by observation of a single, idealized synchronic state.

In Section 4 we will see a set of cases involving variation between *à* and *de* in particular infinitival complement expressions in Modern French, which, when closely examined, show evidence of semantic conditioning, rather than simple free variation. We return below in Section 5 to the question of how the various kinds of variability discussed in this paper, and the range of variation from more to less choice or no choice at all, are to be interpreted in synchronic and diachronic terms. We now turn to a consideration of *à* and *de* outside of the infinitive construction.

3. Semantic analysis of *à* and *de*

In this section we present a brief description of the chief uses of *à* and *de* in their relatively lexical, rather than grammatical uses. Our discussion here is necessarily briefer than the subject deserves; a full account of the polysemy networks associated with these elements re-

quires a thorough investigation in its own right, which we leave to future research.

Talmy (1974, 1983 and elsewhere) describes the semantics of spatial configurations using the notions of figure and ground. The figure is an object whose location is being described, and the ground is a second object or location with reference to which the figure is located. In French and English, as well as other European languages, spatial relations between figure and ground are expressed by prepositions. It is clear that the idea of a figure-ground relationship underlying this description goes well beyond purely spatial relations between physical objects, and comprehends also temporal relations and relations among non-concrete entities in general. The fact that the prepositions indicate parallel relations in essentially different conceptual domains (e.g. space vs. time) is one of the things that leads us to say that prepositions are in general polysemous.

The French linguists Gougenheim and Pottier mentioned above have described the semantics of French prepositions in a way that connects their spatial with their non-spatial uses, including temporal and other more abstract relations.²³ Their descriptions anticipate cognitive linguistic studies of the semantics of locationals and prepositions such as Casad (1982), Hawkins (1984), Vandeloise (1984), Brugman (1988), and two recent and very significant studies, Cadiot (1991) and Cervoni (1991).²⁴ We will build on the insights of these scholars in our brief description of some of the principal lexical uses of *à* and *de*.

Example (4) includes some uses of *à* that presumably no one would object to calling meaningful. In addition to any grammatical function it might have in these uses, *à* clearly indicates in each case a particular semantic relationship between a figure and a ground.

- | | | |
|-----|---|------------------------------------|
| (4) | a. vivre <i>à [Paris]</i> | ‘live in [Paris]’ |
| | b. aller <i>à [Paris]</i> | ‘go to [Paris]’ |
| | c. droit <i>au [but]</i> | ‘right to the [goal]’ |
| | d. partir <i>à [cinq heures]</i> | ‘leave at [5:00]’ |
| | e. remettre <i>à [la semaine prochaine]</i> | ‘postpone to [the following week]’ |
| | f. une lettre <i>à [poster]</i> | ‘a letter to [post]’ |
| | g. une lettre <i>à [ma mère]</i> | ‘a letter to [my mother]’ |

The examples in (4) include both spatial and temporal relations involving a point: either static location of the figure at a point (4 a, d), or a dynamic motion of the figure along a path to a specified point²⁵ (4 b, c, e) (although, of course, the ground in (4c) can be an abstract entity rather than a strictly spatial or temporal entity). Example (4f) also involves a path, but in this case, the interpretation invokes not only simple futurity, but also the idea of intentionality or purpose. Example (4g) involves a spatial goal but also, more abstractly, a transfer of possession, which is also the motivation underlying the use of *à* as an indirect object marker with verbs such as *donner* ‘give’. For (4), we can say that the non-spatial examples are in all instances semantic extensions (here, metaphorical extensions) of the spatial cases, which we might assume to be more basic or prototypical senses.

In the spatial and in most temporal uses of *à*, the preposition is not obligatory in any way; it is possible to substitute other prepositional elements in the same expression, whether they indicate a different figure/ground configuration or roughly the same one, as for example in *vivre dans/aux environs de/à côté de Paris* ‘to live in/around/next to Paris.’ Changing the preposition for another preposition like replacing *à* with *dans* or *sur* in expressions designating spatial relations of concrete objects like *Le livre est dans/sur l’armoire* ‘the book is in/on top of the wardrobe’ necessarily leads to a different meaning, since the prepositions have the principal function of expressing particular configurations of relative spatial orientation.

Interestingly, there are some uses of *à* that are part of fixed expressions, for example in *moulin à café* ‘coffee mill’. Gougenheim treats this case as an extension of the purposive use of *à* evinced in (4f), with which we concur. Only the fact that *à* is an intrinsic part of this expression (and hence obligatory in the expression) would make some linguists hesitant to call this a meaningful use of *à*.

Some examples of clearly meaningful uses of *de* are given in (5):

- | | | |
|-----|-------------------------------------|-----------------------|
| (5) | a. <i>venir de [Paris]</i> | ‘come from [Paris]’ |
| | b. <i>à partir de [cinq heures]</i> | ‘from [5:00] on’ |
| | c. <i>mourir de [faim]</i> | ‘die of [hunger]’ |
| | d. <i>citer de [mémoire]</i> | ‘quote from [memory]’ |
| | e. <i>parler de [Jean]</i> | ‘talk about [Jean]’ |

- f. la lame *de* [*l'épée*] ‘the shaft of [the sword]’
- g. les moustaches *de* [*Charlot*] ‘[Charlie Chaplin]’s moustache’
- h. la maison *de* [*Charlot*] ‘[Charlie Chaplin]’s house’
- i. le meilleur *de* [*tous*] ‘the best of [all (of them)]’

It is clear from the examples in (5a-d) that *de* has a dynamic sense in which a figure originates (spatially or more abstractly) from a ground (of unspecified configurational properties). This sense, which we might call the “source” use, has a spatial subcase represented by (5a). The temporal and causal uses of *de* such as found in (5b) and (5c), and the abstract, but spatial-like case in (5d), are clearly extensions of the source use in non-spatial domains. The abstract sense of “concerning” or “about” found in (5e) can also be considered as an extension of the source use, since the person discussed can be viewed as a (metaphorical) source of the qualities, properties and actions associated with him or her that can be discussed via language.

However, it seems that most of the senses of *de* in French are actually static. Specifically, the part/whole relation exemplified in (5f) and g, in which the ground is a whole entity and the figure is some part of that entity, seems to be central in that almost all of the other senses are relatable to it. For example, the idea of inalienable possession in (5g) can be thought of as an extension of a part/whole relation: both share the property that the figure is subordinate to the ground. With inalienable possession, most typically a part/whole relation involving body parts, the figure is physically under the control of the ground entity. With alienable possession (as in (5h), the idea of control is generalized to sociophysical control in the form of rights sanctioned by a community.

The examples in (6) are some additional uses of *de* whose meaningfulness might be considered debatable. We consider these cases as directly relatable to those discussed above:

- (6) a. *boire de l'eau* ‘drink water’
- b. *les côtés d'une page* ‘the sides of a page’
- c. *la taille des arbres* ‘the size of the trees’
- d. *être armé d'[un bâton]* ‘be armed with [a stick]’
- e. *la ville de Paris* ‘the city of Paris’

(6a) can be viewed as another type of extension from a prototypical part/whole relation. Expressions like *trois pièces de cette machine* ‘three parts of that machine’ clearly involve a part and a whole; the part, in this case, is quantified. One short step from this type is expressions like the one in (5i), in which the expression *le meilleur de tous* singles out one entity from a larger collection. The single unit is viewed as a part of a larger entity, in this case not a simple object but what Langacker (1991a) calls a “reference mass”, or hypothetical mass against which particular quantities are measured. Similarly we find examples like *boire trois tasses d'eau*, with an overtly specified quantity of a reference mass. From such uses, again, it is but a small semantic step to the use of *de* in constructions involving indefinite quantities such as (6a), *boire de l'eau*. The only difference between *boire trois tasses d'eau* and *boire de l'eau* is that in the case of the latter, no particular quantity is specified; hence the indefinite reading of the expression. Traditional grammarians recognized the motivation for the use of *de* in the *boire de l'eau* type of expression, as shown by their use of the term “partitive”, which suggests a part/whole relation. Because of the obligatoriness of the element *de* in expressions with a mass term as the object of the verb, however, its meaningfulness would have to be questioned by linguists holding the view that obligatoriness is incompatible with meaningfulness.

There is, clearly, a relation between the part/whole sense and the source sense, which has to do with the removability or separability of the figure from the whole to which it is related (e.g. in *l'épluchure de la pomme* ‘the skin of the apple’).²⁶ However, it is also clear that in French *de* is used for many cases of figure/ground relations in which separability of parts is not at issue. First, there are cases like (6b), *les côtés d'une page*, in which there is a relation between a ground which is an entire entity, and a figure consisting of entities that do not strictly speaking represent parts but yet which together constitute the entity as a whole. The sides of a page are of course not removable from the page. Physical separability is lacking, although there is a “constituting” relation that is something akin to a part/whole relation. We might say that the sides are intrinsic to the page.

The notion of intrinsicness of the figure to the ground is a useful one, as it covers other cases that go beyond the part/whole relation,

and even beyond the similar “constituting” relation. Examples like *la taille des arbres* ‘the size of the trees’ and *la couleur des yeux* ‘the color of the eyes’ are cases in which the figure is a quality of the ground. A quality can be seen to be another kind of intrinsic aspect of an entity.

Langacker (1992) has analyzed English *of* as designating an intrinsic relationship between two entities. We believe this characterization is appropriate for French, but only for the static uses of *de*.²⁷ As Langacker points out, a part/whole relation is just one specific type of intrinsic relation, albeit a particularly salient and obvious one. We can hypothesize that in English and French, the notion of ‘part of’ provides the semantic basis for an extension to any type of intrinsic relation of a figure to a ground. A still further extension would yield the general sense proposed by Langacker, in which only an intrinsic relationship is specified, without regard to the directionality of figure and ground.

It is the latter general sense that is evidenced in instrumental relations such as the type found in (6d). In this case, the instrument (*bâton*, etc.) is an intrinsic aspect of John’s being armed. The concept of being armed necessarily evokes some instrument that one is armed with. (In this case, unlike the other cases discussed, the ground is an intrinsic aspect of the figure, rather than vice versa.) Related to such cases are relations between an action and the means or manner by which it is done, as for example in *dire de vive voix* ‘to say something by direct oral transmission [i.e. not by telephone etc.]’. Semantically, these are presumably farther removed from the part/whole sense than either the “indefinite partitive” (*boire de l’eau*) or the “associated quality” sense (*la couleur des yeux*).

Another kind of intrinsic relation is that found in (6e), in which *ville* and *Paris* designate the same entity in the expression, although characterized at different levels of specificity. The head noun describes a definite, specific entity (note that expressions of this type must have a definite article) by means of a category label (*ville*), and the *de*-phrase names the specific entity in question by means of a proper noun. A category label is surely intrinsic to the conception of a particular proper noun entity that instantiates the category.

To some extent the semantic links among the senses of *à* and *de* described above reflect the diachronic path of progressive semantic extension undergone by these elements.²⁸ But of course reanalysis can and does occur, and thus the structure of the polysemy network may not reflect in all particulars the diachronic development. For our purposes, what is important is not the precise diachronic trajectory these markers underwent, but rather the current synchronic relatedness of the senses. We believe that speakers can and do make such abstract generalizations about the relations of grammatical elements, and these are reflected in their usage of such elements and the novel extensions that they make.²⁹

4. À and *de* in infinitival constructions

In this section we treat a number of cases in which *à* and *de* alternate, with particular focus on infinitival constructions. We show that there are subtle, yet discernible meaning distinctions in the uses of these elements, and moreover, these distinctions are parallel to the meanings of *à* and *de* that are clearly visible in other uses of the items as discussed in Section 3.

The cases of *à* and *de* in (4) and (5) above are some of the principal uses in which those elements are clearly meaningful. Some cases in which they would be considered meaningless (with the assumption of obligatoriness implying meaninglessness) include impersonal constructions, as in (3); the “indefinite partitive” of (6a), where the preposition *de* forms part of the constructions in question; and certain complex noun phrases like *machine à écrire* ‘typewriter’ and *ville de Paris* ‘city of Paris,’ in which the preposition can neither be omitted or replaced by another. In most or all of these cases, quite apart from obligatoriness, there is another reason one might be tempted to resort to making the claim that the prepositions are meaningless: it is difficult to describe a particular meaning or meanings for them. Spatial relations are far easier to discern and describe.

Diachronically, as in the cases of the clearly meaningful uses of *à* and *de* listed in (4) and (5), the uses of *à* and *de* with obligatory prepositions developed from the spatial uses of these prepositions.

Some of these uses, like *à* and *de* with infinitives, were already present in Old French (cf. Ménard 1973: 165), while others developed subsequently. Most linguists and grammarians would not relate these uses to their spatial senses synchronically.

For some of these cases, it is not hard to see a motivation for the use of the preposition in question. For example, in the case of *s'intéresser à*, it seems quite reasonable that the notion of a person directing attention toward something, would make *à* the expected preposition. The goal-directedness of the predicate would fit well with the goal-directed semantics of *à* as described in Section 3. A counter-argument could be made, of course, that the occurrence of *à* in this expression may be historically motivated, but synchronically it is not motivated because the speaker must use the form in this expression. The appearance of *à* is therefore simply a part of the grammar. The instances of freely variable *à* and *de* (e.g. *commencer à/de*) are also part of the grammar under this view, rather than having semantics of their own, because the speaker is not using them to make any communicative distinctions since they vary even to the point of confusing people; in some cases, they cannot signal meaning and are therefore meaningless.

The two kinds of instances discussed so far, however, do not exhaust the possibilities. There are cases that are intermediate to these two sorts; and the intermediate ones, we claim, give the key to understanding how to deal with the prepositions *à* and *de* in general. The examples we next consider are first of all intermediate in terms of obligatoriness; we find a choice of possible forms to use in the preposition slot, but here the choice is quite limited, generally involving only one other possibility, out of the restricted set of *à*, *de* or zero. Regarding meaningfulness, these examples resemble the obligatory uses, in that it is difficult to precisely state a meaning for the prepositions. In fact, however, as we will see, the relation to the clearly meaningful cases in (4)-(5) turns out to be perceptible and describable. We will proceed through a number of cases, ending with those that incontrovertibly have obligatory prepositions, and hence are candidates for meaninglessness. The import of our discussion is to show that there is no way to non-arbitrarily draw a line between meaningful and non-

meaningful prepositions in these, and by implication, any, constructions.

The alternate forms *toucher à* and *toucher* ‘touch’ can both be used to refer to making physical contact with objects, as illustrated in the following sentences:

- (7) a. *Cet enfant touche à tout ce qu'il voit.*
 ‘That child touches everything he sees.’
- b. *Elle a touché le radiateur.*
 ‘She touched the radiator.’

But as Gougenheim noted, there is a subtle distinction in usage between these forms: a greater degree of intentionality is associated with *toucher à*, as in the case of (7a), in which the child is touching objects on purpose, presumably to explore them. *Toucher* without the preposition presupposes nothing about intentionality, and is the normal form to use in situations where the subject participant has accidentally touched something. In (7b), for example, a reasonable interpretation is that the radiator was touched by accident. For such a situation, *toucher à* would be less likely to be used. Furthermore, only *toucher à* occurs in the extended sense of ‘hit’ and ‘hurt’; and in these senses it must involve intentionality. The *à*, since it introduces a semantic difference, has meaning, under standard assumptions about compositionality. Moreover, that meaning is clearly related to the goal-directed sense of *à* that we saw earlier, although it seems clear that here spatial goal-directedness is subordinate to a mental goal-directness.

The subsequent examples all relate to the infinitive construction. The sentences in (8) show an alternation between *à* and *de* with the verb *s'empresser*. We again find a meaning distinction associated with the choice of form used: *S'empresser à* means ‘to do something enthusiastically’, while *s'empresser de* means ‘to hurry to do something’.

- (8) a. *Il s'empresse à satisfaire ses patrons.*
 ‘He strives to satisfy his superiors.’
- b. *Il s'empresse d'ouvrir la porte.*
 ‘He hurries to open the door.’

In (8a), the subject acts with zeal or enthusiasm, while (8b) expresses only physical exertion. Moreover, in (8a) the interpretation is certainly one of willingness on the part of the subject to carry out the event designated by the verb, while for (8b) it is easier to imagine a situation in which the subject must hurry due to external stress, despite actually being disinclined to perform the action. Thus there is a difference in degree of internal commitment of the subject to carrying out the infinitival process. In both this case and that of *toucher/ toucher à* we can say that the preposition *à* is used in cases of greater mental directness towards a goal than is found with the use of *de* or zero.

As discussed earlier, *à* has a dynamic sense in which it expresses the trajectory of the figure to the point represented by the ground. Thus, both a path and a destination point or endpoint are invoked. The notion of a path toward a goal is also, we would claim, central to the meaning of *à* in its use with infinitives. In terms of figure and ground, we can analyze *à* as coding a relation between the subject referent, which represents the figure, and a ground, represented by the action or process coded by the infinitive. The figure is construed to follow a path to the ground via the process designated by the main verb; and the path involved can be characterized, as a first approximation, as the active application of the subject to the goal of carrying out the action named by the infinitive.

Moving to the semantics of *de*, we claim that the notion “intrinsic relationship” discussed in Section 3 is entirely applicable to the use of *de* to introduce infinitives. In any infinitive construction, there is an intrinsic relation between the action designated by the main verb, and that designated by the infinitive. The conception of *commencer* ‘begin’, for example, necessarily invokes the conception of a process which is begun. This process can be made explicit by means of an infinitive.

Although infinitive constructions always involve an intrinsic relation between the action of the main verb and the action coded by the infinitive, only *de* explicitly makes reference to that relationship. Thus, the semantics of *de* make it appropriate to occur in the infinitive construction. However, it will only occur there where some more specific relationship, such as that coded by *à*, is lacking. *De*, in contrast to *à*, has a much more abstract or semantically “bare-bones”

meaning; it refers solely to an intrinsic relationship of an unspecified type. It makes no overt reference to this relation; its semantic specifications are simply different. Of all the French prepositions, *à* and *de* have semantic specifications that are most compatible with the relation between a main verb and an infinitive; this is why these two are the principal prepositions occurring in this construction, and are synchronically and diachronically in competition. We discuss this competition further in Section 5.

Now let us observe another set of contrasts in the infinitive construction. First, we find a contrast between *risquer à* [Inf.] and *risquer de* [Inf.], both translated as 'risk', as in the following examples:

- (9) a. *Je risque de tout perdre.*
 'I risk losing everything.'
- b. *Je ne me risque pas à sortir seule le soir.*
 'I'm not going to risk walking home alone in the evening.'

In (9a), the complement of the verb *risquer* refers to what is risked, i.e. the undesirable consequence that can happen to the subject of the sentence. In (9b), in contrast, the complement refers to an activity or potential activity of the subject that is predicated as risky. Therefore, (9b) involves a goal-directed mental orientation of the subject towards the event designated by the infinitive clause, a property that is lacking in (9a). (The predication in (9b) is negated, as we might expect to be generally the case with verbs of risking potential actions with undesirable consequences; but negation requires a prior positive conceptualization.) The parallel with (8) is evident.

In (9), we have not only a contrast in preposition, but a contrast between the pronominal, or *se*-form, and the non-pronominal form of the verb *risquer* 'risk'. As mentioned above, pronominal forms of verbs often occur with *à* before the infinitive, while contrasting non-pronominal forms tend to occur with *de*. (There are non-pronominal verbs that take *à*, and pronominal verbs that take *de*, as in (8b); but there are as far as we know no pronominal/non-pronominal contrasts where the preposition choice is opposite to that in (9).) In the case of this particular verb *risquer*, grammars and dictionaries are in agreement regarding the fact that *de* cannot be used with *se risquer*, and *à*

cannot be used with *risquer* alone. Thus we have a situation which would seem to fall under the set of cases discussed earlier, in which there was no choice available in the preposition used in a given construction, in this case the infinitival construction. Yet we found the same type of meaning contrast as found in (8), in which choice is involved.

Let us look at a second example of this type of situation, illustrated in (10) with the verbs *décider/se décider* ‘decide’:

- (10) a. *Nous avons décidé de partir [sur-le-champ].*
‘We decided to leave [right away].’
- b. *Nous nous sommes [enfin] décidés à partir.*
‘We [finally] decided to leave/We [finally] made up our minds to leave.’

Here again there is a difference in the usage of *à* and *de*. (10a) would be most appropriate in a context with two characteristics: first, there is little or no temporal separation between the subjects’ arriving at the decision and the carrying out of the decision. Second, the time that it took to reach the decision itself is irrelevant, although the implication here is that it was not a long process. The adverbial in brackets reinforces these characteristics of the context, but is not really necessary; the context given is simply the one most likely to induce (10a). In (10b), in contrast, the temporal separation between arriving at the decision and carrying it out is irrelevant; the subjects might act on their decision now or later, although the most neutral reading is probably that they will do it later. In regard to the amount of time taken to reach the decision, it is clear in this case that the decision was arrived at after a long process of deliberation. This effect remains with or without the reinforcing adverbial *enfin*. The subjects had to engage in a noticeable level of cognitive problem-solving, and overcome their uncertainties before the decision was reached. More intensive and prolonged mental activity is therefore involved in arriving at the decision to carry out the event specified in the infinitive clause. Hence the appropriate English translation of (10b) with ‘made up their minds’.³⁰ This greater level of goal-orientedness and mental participation of the subject occurs with the use of *à* and not *de*.

In all of the examples we have considered so far, we see the same semantic distinction associated with the use of *à* vs. *de* or zero: greater mental goal directedness on the part of the subject is associated with *à*.³¹ The reflex of this distinction varies along with the lexical semantics of the verbs in each particular case, but the generalization is valid in all the cases that we have observed.

Regarding the cases of pronominal vs. non-pronominal alternations we considered above, we might note that there are a fair number of other examples of the same type, obeying the same semantic generalization, e.g. *s'essayer à /essayer de* 'try to' and *s'offrir à/offrir de* 'offer to'.

It could, of course, be suggested that the difference in preposition in cases like these is simply triggered by a grammatical difference in the form of the verb: pronominal vs. non-pronominal. But when such alternations are more closely examined, it becomes evident that this formal difference is associated with a difference in meaning between the two forms of the verb, pronominal versus non-pronominal. *Risquer* and *se risquer* are semantically different in that they take complements bearing different semantic relationships to the verb: what is risked in the sense of put at stake, versus what potential event involving the subject is risky. Similarly, *décider* and *se décider* designate slightly different kinds of decision-making processes: the one expressed by *se décider* represents the culmination of a more drawn-out process, suggesting the traversal of a path leading to an action or state. We can say therefore that the use of *de* vs. *à* in these cases is motivated by the difference in verbal semantics introduced by the pronominal/non-pronominal contrast.³²

The above discussion leads us to the conclusion that the meanings of the prepositions are compatible with the meanings of the pronominal vs. non-pronominal verbs they occur with; this compatibility motivates the use of the prepositions where they occur, and therefore is an important factor in the difference in distribution of the prepositions associated with the form of the verb.

The case of *s'empresser* in particular (example 8) shows that we are not dealing here simply with grammatical facts, but semantic facts. Recall that in that case, there was a difference in preposition, but with exactly the same form of the verb. With *s'empresser*, the preposition

is the only signal of the distinction in meaning, while in the case of (9) and (10) and the other cases of pronominal/non-pronominal alternation it is the use of *se* that signals the difference in lexical semantics, and the prepositions are to some extent redundant. We have therefore found a situation in which the same semantic distinctions are manifest regardless of whether the preposition is obligatory or not. What this demonstrates, we claim, is that the fact of obligatoriness is essentially orthogonal to the issue of whether the prepositions involved have meaning. In the case of the pronominal/non-pronominal alternations, it would be a loss of generalization to say that since the prepositions are obligatory with a given form of a verb, they must therefore be meaningless: We could then not account for the fact that the same semantic distinction is associated with the contrast between *à* and *de* as in the cases where the speaker has more choice about which to use.

There are some apparent exceptions to the generalization that verbs suggesting a mental traversal of a path to a goal on the part of the subject take *à* while those lacking this semantic property take *de* (or some other form, e.g. zero). Gougenheim cites in a footnote two cases he makes no attempt to explain, namely the verbs *s'efforcer* ‘make an effort’ and *tâcher* ‘try’. These verbs both require effort on the part of the subject, implying an attempt to overcome an obstacle, and therefore might seem to be more appropriate with the preposition *à* introducing the infinitive. However, both occur with the preposition *de*; *à* is rejected by speakers.³³ A closer examination of these and similar cases shows an interesting generalization: Verbs of ‘trying’ (in a broad sense) fall into two classes: those normally requiring *à* (like *s'appliquer à* ‘apply oneself [to doing s.t.]’, *chercher à* ‘seek to’) and those occurring with *de* (*s'efforcer de* ‘strive, endeavor [to do]’ *tâcher de* ‘try, strive [to do]’, *tenter de* ‘try [to do]’ and *essayer de* ‘try [to do]’). There is a meaning distinction between the two groups which is not immediately evident from the English translations given. To illuminate this distinction, let us observe some contrasts between verbs in the two classes.

One of the differences between the class taking *à* and that taking *de* involves temporal duration. Many of the verbs in the first class have a meaning of extended effort and planning toward a goal, for example with the verbs *chercher* ‘try to, seek to’ and *s'appliquer* ‘apply one’s

efforts to', both of which occur with *à*. The latter verb is exemplified in (11a):

- (11) a. *Je m'applique à apprendre le français.*
 'I'm trying to learn French.' [= applying myself to the task]
 b. *Il s'efforce d'atteindre le lavabo.*
 'He tried to reach the washbasin.'

On the other hand, verbs of trying that take *de*, such as *tenter de*, *essayer de* and *s'efforcer de* are strongly associated with the notion of momentary action or action at a specific time, as in (11b). The idea of momentariness is not strictly necessary with *de*, but it does not easily cooccur with the use of *à*. On the other hand, the semantic property of extended effort is certainly part of the meaning of the verbs that take *à*.

It is noteworthy in this connection that two verbs which do not occur before infinitives, but only before noun phrases, namely *s'adonner* 'devote oneself to' and *se livrer* 'dedicate oneself to' both show a similar association with the idea of duration and, as we might expect from our generalization, take *à* rather than *de*.

A second distinction is based on the potential of the subject for carrying out the process designated by the infinitive. Verbs in the first class, the *s'appliquer* class, have the property that the subject is able (or is viewed by the speaker as being able) to accomplish the action designated by the infinitive. The verbs that take *de*, on the other hand, suggest that there is some doubt about whether the subject can succeed in his/her endeavors. In fact, with some of these verbs, it is quite clear the subject is viewed as not having the intrinsic properties necessary to carry out the action. This is the case with *tenter de* 'try to', and is also evidenced in the example in (11b) with *s'efforcer de*. Thus although the subject is goal-directed in some sense, the speaker does not view the subject as traversing a path ending in the completion of the goal. This suggests that *à* in the infinitival construction carries with it the expectation that the infinitival process will be carried out. In the case of the verbs of trying, it is clear that the expectation resides with the speaker, rather than the subject; but in the other examples given it appears that the expectation is on the part of the subject.

It is interesting to note that, historically, some of the verbs under discussion at one time occurred with the opposite preposition from the one that they now occur with. For example, both *s'efforcer de* and *tâcher de* at one time more normally occurred with *à* rather than *de* (cf. Haase). There is evidence that (as we would expect) there was a transitional period in which both prepositions were used. Bénac (1956: 341) says that both forms can be used in current French, and that although the use of *à* with these verbs is somewhat literary, there are differences in meaning between *s'efforcer à* vs. *s'efforcer de*, *tâcher à* vs. *tâcher de*, and *essayer à* vs. *essayer de*.³⁴ What is particularly interesting is that Bénac's account of the differences follows exactly the parameters which we identified above for the difference in the semantics of the *à* class and the *de* class of ‘trying’ verbs: he identifies the *à* variants of these verbs as indicating a more sustained (“suivie”) action, while the *de* forms are said to imply a momentary action. With *essayer* in particular, he states that the *de* form indicates that the subject is attempting to do something beyond his/her capabilities.

Assuming that in at least some of these cases the distinction between the *à* and *de* expressions is somewhat archaic (insofar as speakers now reject one of the forms), we believe that we are dealing with cases in which the earlier mode of expressing the distinction between two modes of ‘trying’ was with a difference in preposition with the same lexical root, while the modern language tends to use lexical distinctions, i.e. choice of a verb requiring *à* vs. one requiring *de*. Notice that in both cases, choice is involved, although in one case it is at the level of choice of preposition while in the other it is at the level of predicate choice. The difference between these two modes of expression of the semantic distinction in question seems somewhat trivial in this light, rather more insignificant than would be suggested by an analysis in which the preposition is meaningful where there is a choice of prepositions with the same predicate, but meaningless when different verbs are used.

Let us look at a further example in which the obligatory use of a preposition in the infinitive construction is associated with a contrast in meaning. The examples in (12), cited in Gougenheim (1959: 12), contrast two verbs of similar semantics, *rêver* and *songer*, both of which refer to a subject's thought processes.

- (12) a. *Je rêve d'acheter une automobile.*
 'I dream of buying a car.'
 b. *Je songe à acheter une automobile.*
 'I'm thinking of buying a car.'

Here again we find a difference in lexical semantics between the two verbs, although in this case we are dealing with formally distinct verb roots (unlike the cases of *décider de/ se décider à*, etc. considered above). *Songer* indicates that the speaker is actively considering a future purchase, while *rêver*, used here in the sense of wishing for something unattainable, does not. The difference in preposition is coherent with the fact that *songer* has as part of its semantics the property of intentionality or purpose directed at the ground that is lacking in the verb *rêver*. Moreover, once again there is a contrast in terms of expectations: the lexical semantics of *songer* include the default expectation on the part of the speaker that he/she will carry out the infinitival process; hence the use of *à*.

In keeping with our discussion above, we can say in this case that while the individual predicates may require a particular preposition, the speaker nevertheless has a choice of using a predicate invoking a path-goal construal, or one of somewhat similar meaning but lacking in such a construal. The preposition that appears in each case is one that is compatible with the semantics of the verb, and redundantly encodes the relation between the main verbal process and the infinitival one.

5. Interpretations, synchronic and diachronic

Up to now, we have considered the case of *à* and *de* before infinitives, and were able to show that even prepositions introducing infinitives can be meaningful, even though the meaning involved is rather more grammatical and abstract than that found in the relatively more concrete cases illustrated in (4) and (5).³⁵ We found contrasts in meaning that are specifically associated with the differences in the preposition used (*à* vs. *de*), and, moreover, these contrasts can be accounted for by

positing abstract meanings for *à* and *de* that relate straightforwardly to their core uses as discussed in Section 3.

Essentially, the range of cases we have presented shows that any dividing line that could be drawn between the sets of phenomena illustrated in (4) and (5), on the one hand, and the cases of clearly obligatory uses such as that illustrated in (12) would be completely arbitrary. It would have to cut through the set of intermediate cases which, like the obviously meaningful cases, allow for some degree of alternation of meaningful elements, but which also have a rather abstract grammatical meaning that fits well with the cases where there is less choice, and even with the extreme cases where there appears to be no choice at all.

If we claim that any of the prepositions in (9)-(12) are meaningless, then the similarity with cases like those in (7) and (8) would have to be discounted, and we would lose the generalizations that hold them together and link them with the less grammatical uses illustrated in (4) and (5). We are therefore led to the conclusion that the prepositions are meaningful in all the cases we have considered, not only where there is variation in their use, but even where they are obligatory.

If the choice of preposition is motivated by the meaning intended to be conveyed in the sentence, regardless of whether the use of a preposition is obligatory, we can understand the cases of obligatoriness simply as cases in which one particular form has been conventionalized to the exclusion of the other in the course of time. Maximal grammaticalization is not therefore inconsistent with semantic motivation. The processes of grammaticalization that operate on prepositions do two things: On the one hand, they determine the semantic extension of a given form, for example, the extension in meaning that allowed both *à* and *de* to come to introduce infinitives in the first place. At any given synchronic stage, insofar as the uses of the prepositions in such constructions show systematic relations to the more concrete uses, they have a meaning. On the other hand, grammaticalization also involves a general tendency of loss of choice and increasing obligatoriness (cf. Lehmann 1985, Heine and Reh 1984). Even in expressions where this process has gone to the extreme, i.e. where there is no choice of form used, observation of the entire system of uses of the

form shows the close relation of the non-obligatory and the obligatory cases.³⁶

A question that arises in connection with these postulated meanings is the following: Why has there come to be a certain degree of confusion as to which preposition is more appropriate to use in particular constructions or expressions? Our hypothesis is the following: *à* and *de* both make reference to a relation between a figure and a ground, and both of them are semantically abstract or schematic enough so that the ground can refer to a process rather than a concrete entity. For some verbs, both usages are conventionally sanctioned, but in certain contexts where it is not necessary to distinguish between the more specific meaning of *à* and the more general meaning of *de*, it will be possible to use either one. The use of one of these prepositions versus the other is simply a matter of imposing alternative ways of viewing the situation by means of the expression chosen: With *à*, what is focussed on is the path/goal relationship, in which the process designated by the infinitive is the goal, while with *de*, what is made reference to is the intrinsic relationship between the two processes indicated by the verbs. In many contexts, the difference is minimal in terms of communicative effect. And since neither expression has been fixed, i.e. has grammaticalized to the point of becoming the only form conventionally used for the individual contexts in question, we find variability.³⁷

Lack of complete obligatoriness goes hand in hand with the existence of variation. Where there is variation, we find a range of degrees of difference in meaning: In some cases it is clearly discernible, in other cases, it requires some exercise of the analytical faculties, and in still other cases it is so subtle that speakers do not in every instance choose between the alternants in a principled way; generalizations, if any, could be made only on a statistical basis. These are cases in which the meaning of the prepositions has lost much of the specificity that is apparent in the more clear-cut cases. It is reasonable to assume in such cases that the construction or expression is undergoing a diachronic change. In time, the continuance of this diachronic process of grammaticalization could lead to an eventual loss of choice, and a fixing of a particular preposition that must be used in the construction or

expression. This would be the extreme case of obligatory use of the preposition, discussed in Section 2.

6. Implications and conclusion

The analysis given above for *de* and *à* in infinitive constructions has implications that reach beyond those constructions. In particular, it raises the question of whether or not other cases of the obligatory appearance of *de* and *à* in particular grammatical constructions are necessarily entirely arbitrary and unmotivated. If obligatoriness is suspect as the sole grounds on which a linguistic form is determined to be meaningless, then we are justified in examining such cases more closely to see if semantic factors come into play in determining which preposition is associated with which constructions.

We will not make such an examination here, but will merely note that we believe our analysis can be easily extended to other well-known cases of obligatory *de*. In impersonal constructions, for example, such as *C'est une honte de pleurer* illustrated in (3), it is reasonable to understand the use of *de* as opposed to *à* as a result of the lack of active goal-directedness on the part of the subject. Indeed, in the case of impersonals there is no human subject of which such a property could hold (and hence, no expectation that the infinitival process would ever be carried out). *De*, which expresses only some non-specified intrinsic relation between the two processes, is appropriate for use in impersonal constructions and has become a conventional part of those constructions.

We conclude by emphasizing once again that the question of meaningfulness of grammaticalized elements is essentially independent of the degree of obligatoriness of these elements. The widespread assumption that obligatoriness is proof that an element is purely grammatically determined, and that consequently its presence is independent of any semantic properties, requires reassessment. Langacker has made this point in numerous publications, since it is so central to progress in Cognitive Linguistics. This paper has added the following to the discussion of this issue: We have first of all pointed out that more variation in a particular grammatical construction exists than has

previously been recognized, and that obligatory cases are a small subset at the extreme end of a continuum of variation. Secondly, the cases we examined illustrate the fact that obligatoriness is less straightforward than might be supposed; determination of obligatoriness in some cases depends on an arbitrary selection of level of observation. Choice among lexically distinct predicates is no less choice than choice of preposition with the same verb root in derived and underived form, or choice with an invariant verbal form. Finally, we showed that any attempt to segregate the clearest cases of obligatoriness from less clear-cut cases will lead to loss of generalization.

As we might expect, such a central issue as the relation of meaningfulness and obligatoriness is not new in linguistics, and it is worthwhile to recall the words of Roman Jakobson in this connection, in his discussion of Russian case:

Incidentally, though it happens that in certain contexts, the use of a given case is compulsory, and that in this instance its meaning turns out to be redundant, this circumstance does not allow us to equate even so predictable a meaning with meaninglessness. It would be a sheer misunderstanding to imagine that these occasional redundancies might invalidate to any extent the search for the general meaning of grammatical cases (Jakobson 1966: 272).

One of the examples Jakobson gives to illustrate the point is that of the Russian noun *xleb* ‘bread’, which does not lose its meaning when it occurs after the adjective *peklevannyj* meaning ‘wholemeal’, even though *xleb* is the only noun that can be expected to follow such an adjective. We would like to urge linguists to return to this common-sense position, so that progress can be made in the investigation of grammatical structures and their relation to the rest of language.

Notes

1. The present paper is a much-revised version of our ICLA conference presentation. For useful comments and suggestions we are indebted to Michel Achard, Henning Andersen, Michael Barlow, Claire Blanche-Benveniste, William Croft, Suzanne Fleischman, Hans Kronning, Ronald Langacker, Françoise Santore, Sanford Schane, Elizabeth Traugott, Thomas Wasow, Anne Zribi-Hertz, and an anonymous reviewer. Special thanks to Gene Casad for his editorial suggestions and other comments. S. Kemmer is grateful to the Committee on Research, UCSD, for a grant which enabled her to conduct research in Israel with H. Bat-Zeev Shyldkrot in 1991.
2. We use the term “preposition” here in accordance with its use in French grammar, where that term applies to *à* and *de* in all their occurrences (cf. below).
3. See for example the booklet *Est-ce à ou de?* (“Is it à or de?”) by E. Lasserre (1982). A source often consulted for usage guidance by people with more academic backgrounds is Gross (1975).
4. “signs that are absolutely empty, and for that reason, incapable of denoting anything.”
5. “the more it is established as an empty word, the more its abstract value is increased.”
6. De Boer (1926) further divides the non-full prepositions into “la préposition vide ‘écrasée’” (the ‘crushed’ empty preposition), “la préposition vide ‘introductrice subordonnante’” (the empty ‘subordinating introducer’ preposition), and “la préposition ‘fin de mot’” (the ‘end-of-word’ preposition, i.e. one forming a semantic unity with the preceding word).
7. See in particular Pottier (1962: 241-252). For recent discussions of the “full/empty” dichotomy, see Cadiot (1991) and Cervoni (1991: 128-140). To Pottier’s survey, Cervoni adds additional critiques of work appealing to empty or colorless prepositions, e.g. Spang-Hanssen (1963).
8. Other hallmarks of structuralism exhibited by generative grammar include the preference for sharp dichotomies and the elevation of the synchronic plane to the primary, if not sole concern, of linguistics.
9. “a simple marker of subordination, which does not contribute to semantic interpretation.” It should be noted that Ruwet was referring to *à* in global terms, i.e. even in its use in spatial adverbial phrases (*le livre est à la bibliothèque*). In this respect his analysis differs from that of others who assume meaninglessness only in particular grammatical contexts, as does Gaatone, cited below.

10. "It is known however that numerous prepositions are in certain contexts purely grammatical elements.... At the synchronic level, these prepositions, entirely conditioned by the context and thus not contributing at all to the content of the utterances, although indispensable to their structure, are to be clearly distinguished from the "full" prepositions resulting from a free choice within a given context and interchangeable within that context with other prepositions (*the letter is in/on/under... the book*)."
11. For example, the treatment of prepositions that were inherent to particular grammatical structures (e.g. passive *by* in English) in Chomsky's *Aspects* model rested on this assumption. Such elements were introduced by transformations, and, since transformations were not permitted to introduce meaningful elements (Chomsky 1965: 132), these prepositions were necessarily meaningless. More recently, Nichols (1988) uses the fact that inalienable possessive morphology is obligatory (lexically required) in particular languages as an argument that such morphology has no semantic basis.
12. For descriptive treatments of the occurrences of *à* and *de*, see Gross (1975) and Togeby (1983-84).
13. For an account dealing with the grammatical status of French prepositions, see, for example, Huot (1981). One reason why consideration of grammatical properties of these elements is not relevant to our aims is that differing grammatical status of two elements does not preclude relating them semantically (cf. Brugman 1984 and Traugott 1986). In addition, contrasting with the assumptions of generative grammar, we do not believe that grammatical properties provide unequivocal evidence of the "deep" syntactic nature of an element (e.g. whether an element "really is" a preposition, or, alternatively, something else such as an infinitive marker or complementizer). In our view, grammatical properties simply provide clues to the semantics of particular elements and their interaction with the semantics of specific constructions; and give evidence of the diachronic trajectories of particular elements as they become increasingly grammaticalized.
14. Cognitive-functional linguistics and grammaticalization theory are not unrelated; they share a good many assumptions and in fact there are a number of scholars who incorporate the major concerns of both traditions in their work. The main difference is one of focus: the former is concerned primarily with establishing the semantic basis of grammar, while the latter stresses the interrelation of synchrony and diachrony and the necessity of integrating both into an explanatory account of grammar.

15. Fillmore, Kay and O'Connor (1988) have a conception of “construction” which forms the basis of that assumed here. Their use of the term, however, is somewhat broader than ours: it includes entities ranging from abstract grammatical patterns with no lexical content, to patterns with some degree of specific lexical content recurrently associated with them, to the extreme case in which virtually all the lexical content of a construction is fully specified in the grammar (i.e. fixed expressions). We use the term “expression” as a convenient way of referring to constructions with some of their lexical content filled in, and reserve the term “construction” for grammatical units with little or no lexical specification (i.e. no lexical specification other than highly grammatical lexemes like *à* and *de*).
16. Essentially, we believe that the bare infinitival construction contrasts with the constructions with *à* and *de* in that it lacks any temporal separation between the main verbal event and that designated by the infinitival process. It may be possible to generalize this property to minimal conceptual separation between the events.
17. The best way to investigate the extent of variation in the infinitive construction, and the patterning of such variation, is to observe concordance data from large databases of French. We believe such investigations will uncover a great deal of intricate systematicity in the semantic conditions under which *à* and *de* are used, and can serve as a test of the basic characterizations of the meanings of these elements that we propose here.
18. In addition, we consulted Chevalier (1964), Sandfeld (1965), and Le Robert (1958-64) and found the situation represented there consistent with our observations. The usages described by Gross (1975), it might be noted, are somewhat more restricted than those allowed by the other authors we consulted.
19. Haase devotes over 70 pages to a discussion of the uses of *à* and *de* in the 17th century; he was aiming for an exhaustive picture, taking into account all the written sources available to him. He catalogues verb after verb for which the norms governing the use of the prepositions have changed. We cite just a few of his copious examples.
20. The 17th century in particular was a time when the language was in the process of standardization, concurrent with a great deal of grammatical innovation that was accompanying the development of the literary language. Normative grammarians of the time made great efforts to check the profusion of variant constructions. Many writers sought to follow the dictates of the French academy with regard to preposition choice in particular expressions. It is clear

that there was a good deal of variation in what was written, and to a certain extent this must represent indeterminacy in the spoken language as well.

21. In some cases a given form can become obligatory in a given construction, not just with particular expressions. For example, in English, the element *to* can be said to be obligatory in the infinitival complement construction Verb + *to* + [Inf]. It would be interesting to investigate the issue of grammaticalization within an expression vs. within a construction; the latter seems intuitively to involve a greater degree of grammaticalization since there is no variation across expressions in the same construction.
22. Many investigators now assume a prototype organization of linguistic category structure, including grammatical categories (cf. Givón 1984; Lakoff 1987; Langacker 1987; Bybee and Dahl 1989; Kleiber 1990; Croft 1991).
23. Two earlier studies worthy of note are Wagner (1936) and Brøndal (1950). Brøndal's study, while an important contribution, is handicapped by the fact that it focusses strictly on systems of oppositions, and thus does not sufficiently address the positive semantic content of the prepositions. The insights of both Wagner and Brøndal are taken into account in Pottier (1962).
24. Of these authors, Vandeloise, Cadiot, and Cervoni are specifically concerned with French prepositions. The latter two authors deal with more grammaticalized as well as spatial uses of prepositions. See also Bartning (to appear) for an account of *de* in compound nominals.
25. Vandeloise more precisely characterizes the relation as involving contact of figure and ground at at least one point.
26. In Latin, the principal use of *de* was the source use; examples that could conceivably be interpreted as involving part/whole relations such as *accusator de plebe* 'an accuser [who is] of the people' seem in general to refer to separable rather than non-separable relationships i.e. 'an accuser coming from the ranks of the plebei'.
27. English, unlike French, has no dynamic 'source' uses of *of*, since these senses are expressed by *from* and *off*.
28. See Traugott (1986) for a discussion of the relation between the synchronic senses of a polysemous element and the diachronic order of development of those senses.
29. If speakers did not make such generalizations, it is difficult to see how the usage of such elements would ever change, or how the changes could ever be systematic.

30. Bilingual French/English dictionaries typically gloss *se décider* as ‘make up one’s mind’. It is interesting to note that French dictionaries tend to state there is a difference in meaning between the two forms, but often cannot articulate it, leaving it to be inferred from the examples (e.g. *Dictionnaire des Difficultés*). *Le Lexis*, on the other hand, explicitly says that *se décider* involves “putting an end to one’s hesitation”. Hatzfeld and Darmesteter (1964) state the distinction in similar terms. A similar situation, it might be noted, holds for many of the meaning distinctions discussed here: in all cases, the examples cited in the reference works support the distinctions we have posited. We believe that these distinctions, although sometimes extremely subtle when sentences in isolation are considered, will be borne out by examination of uses of the relevant forms in larger discourse contexts.
31. Gougenheim’s generalization about the meaning of *à* in cases like these (and related cases with nominal objects) is that it expresses the notion of an “active attitude” of the subject, or an “engagement of the subject in the action” expressed by the main verb. Our characterization, we believe, is more precise, and more explicitly relates the meaning of *à* with the infinitive to the concrete locational sense discussed in Section 3.
32. For an account in which the semantics of the cognate form *se* in Spanish affects the lexical semantics of the verbal event in parallel ways, see Maldonado (1992).
33. Some reference works do not rule out the occurrence of *à* with this verb, for example Bénac (1956). We discuss Bénac’s interpretation below.
34. According to some other sources, e.g. Gross (1975), *à* is no longer in use for these verbs; they occur only with *de*.
35. For a discussion of the notions of lexical and grammatical meaning and the relation between them, see Talmy (1988).
36. The competition of *à* and *de* within the infinitive structure, whether found with individual verbs or across verbs of different semantic classes, illustrates what Hopper (1991) calls the “persistence principle” of grammaticalization, in which central aspects of the earlier meanings of grammatical elements persist in governing their distribution synchronically (see also Bybee and Pagliuca 1987).
37. Conventionalization is of course a factor in all of the occurrences of *à* and *de*: A preposition will only regularly occur with a given verb if that verb has come to conventionally occur with it. What is conventional is not predictable and may change; but paths of change are guided and constrained by the semantics of constructions and their component elements (cf. Kemmer 1993). The

distribution of the forms will therefore reflect both semantic motivation and conventionalized patterns.

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