

THE SEMANTIC FIELD OF SPANISH COOKING VERBS

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0. INTRODUCTION

The purpose of this paper is to present an analysis of the semantic field of cooking verbs in Spanish. First, I will show how the field is structured and explain how the verbs interact, then I will advance a hypothesis as to how these verbs cohere in the field, and finally I will propose that other fields might be looked at in a similar way.

As many words in the field as possible were compiled, for which purpose a variety of texts was used. The division of the words into basic and non-basic was based on the intuitions of ten informants. Five Spanish dictionaries--an ordinary monolingual one, a Spanish/English bilingual one, an etymological one, one on usage, and one of synonyms and antonyms--were consulted, as well as seven cookbooks, five from various areas of Latin America and two from Spain. The informants were all native speakers of Spanish, and, except for two who also spoke English well, they had little or no proficiency in English. They were from as wide a variety of Latin countries as it was possible to find: one from Bolivia, one from Chile, two from Mexico, one from Panama, one from Peru, two from Puerto Rico, one from Spain, and one from Venezuela. Various methods were used to tap their intuitions: (1) numerical scaling of words on a list, (2) a card-sorting task, (3) a sentence-completion task, (4) a short translation, (5) a task in which subjects compared pairs of phrases in order to judge if they were instances of paraphrase or not, (6) making grammaticality judgments on a group of sentences, and (7) answering oral questions about cooking verbs. Appendix I is a copy of the form used in eliciting information from the speakers; for convenience, I have translated the instructions into English, though the data remain in Spanish. Originally, the entire form was in Spanish. Some of the oral questions asked varied across my questioning of the informants, since they were based on each individual informants' earlier replies; other oral questions had to do with what types of foods and utensils would collocate most frequently (or exclusively) with certain cooking verbs.

Some of the techniques I used to question the informants were based on the procedures outlined by Metzger and Williams (1966), who advocate investigative techniques aimed at creating sets of conditions, such as frames and questions, which elicit and govern native responses and which can be replicated. Because they are so controlled, they are interpretable with a minimum of ambiguity.

The combined use of texts and informants is in line with the principles of linguistic methodology outlined by Labov (1972, 1974), who concludes that data elicited from a variety of sources and methods has higher validity than the "intuitions of the theorist himself" (Labov 1972:106). Different methods "can be mutually confirming" (Labov, 1972:118). I believe that is right. In this paper, for example, had I used only my own intuitions as a native speaker, my conclusions would have been limited to my own dialect and would have excluded dialectal differences in meaning, transitivity, and word equivalence. Many facets of language operate in dialectal and cross-dialectal structures, and the researcher who uses only his/her own dialect as evidence is, at best, overlooking a wealth of data and information, and, at worst, developing an incomplete theory.

A word about word: in this paper, I will use it to mean either one single lexical item or a paraphrastic expression. As will be seen, several cooking words in Spanish are not single words, but, in a semantic field analysis, must be treated as if they were.

1. DATA

The basic words in the field of Spanish cooking verbs are the following:

	<u>Verb</u>	<u>Type</u>
1.	<u>cocer</u> 'to cook'	X
2.	<u>cocinar</u> 'to cook'	(X)
3.	<u>asar</u> 'to roast, to broil'	X
4.	<u>hornear</u> 'to bake'	(X)
5.	<u>guisar</u> 'to cook in a certain way' (see page 7 for a full definition)	(X)
6.	<u>hervir</u> 'to boil'	X; Ø
7.	<u>freír</u> 'to fry'	X (and (X))
8.	<u>cocer a fuego lento</u> 'to simmer'	X

The symbol "X" in the "type" column stands for the ability of the verb to take a direct object; thus, verbs with X are to be understood as being obligatorily transitive; except when used reflexively, they may not be used without an overt object. Verbs specified "(X)" are transitive but may be used without an overt object (though an object is always implied; compare "eat" in English). Verbs specified Ø are intransitive. Cocinar 'to cook', hornear 'to bake', and guisar 'to cook in a certain way', when used transitively, are used to

express specific acts of cooking, such as the preparation of a particular food; when used intransitively, they refer to cooking as a general human activity:

	<u>Transitivity</u>
(1) María cocinó la carne. Mary cooked the meat.	X
(2) María cocinó ayer. Mary did the cooking yesterday.	(X)
(3) María horneó las galletas. Mary baked the cookies.	X
(4) María horneó ayer. Mary did the baking yesterday.	(X)
(5) María guisó la carne. Mary cooked the meat.	X
(6) María guisó ayer. Mary did the cooking yesterday.	(X)

Cocer 'to cook', asar 'to roast or broil', and freír 'to fry' cannot be used to express acts of human activity:

(7)	coció	
	*María	asó ayer.
		frió
		cooked
	Mary	roasted yesterday.
		fried

Freír, however, has a dialectal variant: it can be used as a type (X) verb expressing human activity. Three of the informants--two from Puerto Rico and one from Venezuela, all speakers of the Caribbean dialect of Spanish--accepted an intransitive use of freír in the sentence:

- (8) Voy a ponerme a freír.
I'm about to start frying.

For all other speakers, though, sentence (8) was ungrammatical. Generally, freír 'to fry', along with cocer 'to cook' and asar 'to roast or broil' cannot appear without an object. Hervir 'to boil' can be either transitive or intransitive, and it is the only verb in the field of this type:

	<u>Transitivity</u>
(9) La leche hirvió rápido. The milk boiled quickly.	Ø

CHART I

<p><u>asar X₁</u> 'to roast', 'to broil'</p>		<p><u>asar X₂</u> <u>asar X₃</u> 'to roast, to broil'</p>		<p><u>asar X₁</u> 'to roast', 'to broil'</p>	
<p><u>cocer X a la parrilla</u> <u>emparrillar X</u> 'to cook on a grill'</p>		<p><u>cocer X a la parrilla</u> <u>emparrillar X</u> 'to cook on a grill'</p>		<p><u>cocer X a la parrilla</u> <u>emparrillar X</u> 'to cook on a grill'</p>	
<p><u>cocer X al baño maria</u> 'to cook in a double boiler'</p>		<p><u>cocer X al baño maria</u> 'to cook in a double boiler'</p>		<p><u>hornear (X)₁</u> 'to bake'</p>	
<p><u>escalfar X</u> 'to poach' (eggs only)</p>		<p><u>escalfar X</u> 'to poach' (eggs only)</p>		<p><u>hornear (X)₂</u> <u>cocer X al horno</u></p>	
<p><u>estofar S</u> 'to braise' (meat only)</p>		<p><u>estofar S</u> 'to braise' (meat only)</p>		<p><u>cocer X a fuego lento</u> 'to simmer'</p>	
<p><u>cocer X a fuego lento</u> 'to simmer'</p>		<p><u>cocer X a fuego lento</u> 'to simmer'</p>		<p><u>cocer X₂</u></p>	
<p><u>cocer X al vapor</u> 'to steam'</p>		<p><u>cocer X al vapor</u> 'to steam'</p>		<p><u>cocer X₂</u></p>	
<p><u>sancochar X</u> 'to parboil, to boil lightly'</p>		<p><u>sancochar X</u> 'to parboil, to boil lightly'</p>		<p><u>hervir X; β₁</u> 'to boil'</p>	
<p><u>salcochar X</u> 'to cook in salted water'</p>		<p><u>salcochar X</u> 'to cook in salted water'</p>		<p><u>hervir X; β₁</u> 'to boil'</p>	
<p><u>hervir X; β₂</u> 'to boil'</p>		<p><u>hervir X; β₂</u> 'to boil'</p>		<p><u>hervir X; β₁</u> 'to boil'</p>	
<p><u>refreír X</u> 'to refry'</p>		<p><u>refreír X</u> 'to refry'</p>		<p><u>freír X₁</u> 'to fry'</p>	
<p><u>rehogar X</u> 'to sauté lightly'</p>		<p><u>rehogar X</u> 'to sauté lightly'</p>		<p><u>freír X₁</u> 'to fry'</p>	
<p><u>saltear X</u> 'to sauté at high heat'</p>		<p><u>saltear X</u> 'to sauté at high heat'</p>		<p><u>freír X₁</u> 'to fry'</p>	
<p><u>sofreír X</u> 'to fry lightly, especially a sauce'</p>		<p><u>sofreír X</u> 'to fry lightly, especially a sauce'</p>		<p><u>freír X₁</u> 'to fry'</p>	
<p><u>freír X₂</u> 'to fry'</p>		<p><u>freír X₂</u> 'to fry'</p>		<p><u>freír X₁</u> 'to fry'</p>	
<p><u>guisar (X)₂</u></p>		<p><u>guisar (X)₂</u></p>		<p><u>guisar (X)₁</u> 'to cook in a certain way'</p>	

cocinar (X)
cocer X₁
'to cook'

- (15) Me pasé el día asando carne.
I spent the day roasting meat.

--can become:

- (16) Me pasé el día cociendo carne a la parrilla.
I spent the day cocinando cooking meat on the grill.

Neither cocinar (X) nor cocer X specifies the type of process used. Note that in sentence (14) either verb may be used without adverbials, because the word pan 'bread' implies the use of an oven, but, in sentence (16), an adverbial of place must be used, in order to convey the exact meaning of asar X, since meat may be cooked in a variety of ways. The use of adverbials does not make sentences with cocinar (X) and cocer X forced or unnatural in any way, however. In fact, they are often used in precisely this way. In cookbooks, for example, one is more likely to find a periphrastic expression with cocinar (X) or cocer X than one of their one-word subordinate terms.

The main difference between cocinar (X) and cocer X is their differing transitivity. Of the two, cocinar is the only one that can be used with human subjects to refer to human activity:

- (17) Voy a ponerme a cocinar.
I'm about to start cooking.

--is a perfectly good sentence, but

- (18) *Voy a ponerme a cocer.
I'm about to start to cook.

--is not. When there is a need for a verb that must take an object, cocer X is preferred. In a short translation task, speakers were given the following nine English phrases, which involve concepts that either do not exist or else have no currency in Spanish:

- (a) cooking with solar energy
- (b) microwave cooking
- (c) cooking with electricity
- (d) cooking with gas
- (e) cooking with charcoal
- (f) pre-cooked
- (g) a well-done steak
- (h) a medium steak
- (i) a rare steak

The translations of the prepositional phrases varied (i.e., item (a) elicited con energía solar, al aire libre, al sol, and con el calor del sol, all of which can loosely convey the English), but every single speaker translated the verbs in items (a)-(e)--which, in Spanish, have to be infinitives--as cocinar. Indeed, nothing else seems possible. However, item (f), which refers to a specific food having undergone a cooking process, and therefore could have taken either verb, was translated as precocinado (which uses the past participle of cocinar) by only one speaker, but precocido (which uses the past participle of cocer) by all other speakers. With items (g) and (h), which do not mention the word cook at all, the results were even more conclusive: all speakers used the past participle of cocer, producing bistec bien cocido, asado bien cocido, carne bien cocida, and muy cocido for (g) and bistec cocido a medias, medio cocido, carne medio cocida, and bistec cocido a término medio for (h). Interestingly, no speaker used any form of cocer or cocinar for item (i). The resulting translations for it were medio crudo, 'halfway raw', bistec medio crudo, con sangrita 'with blood', rojo 'red', and carne medio cruda 'halfway raw meat'. Apparently cocer X and cocinar can express only a positive concept; they cannot define negatively.

At the next level down in Chart I, the word guisar (X) appears, functioning contrastively with asar X and hornear (X). Guisar (X) refers solely to stove-top cooking and is thus incompatible with other terms at this level:

- (19) ¿Le toca guisar a María?
Is it Mary's turn to cook?
- (20) No, le toca hornear.
No, it's her turn to bake.
- (21) Sí, y a Juan le toca asar la carne.
Yes, and it's John's turn to roast the meat.

Note that guisar, like cocinar, is a type-(X) verb. It can refer either to human activity or to specific acts of cooking. At the next level down in the taxonomy, guisar (X)₁ contrasts with cocer X₂ and freír X₁. Guisar (X)₁ means to cook in a certain way, and is a combination of two distinct processes: first, the ingredients--usually meat or fish, but sometimes vegetables--are cut up into small pieces and fried, then there is a period of further cooking which can be either short or long; it always involves the addition of a small amount of liquid which, together with spices and other ingredients (such as onions and tomatoes), forms a small amount of rather thick sauce. This is a popular way of preparing food across many cultures. Many Chinese dishes and practically all curries, for instance, are examples of this type of cooking. Guisar (X)₁ has no subordinate terms.

Despite guisar's componential complexity, it is basic. It is a very old word, being attested as far back as 1140, in the Poema de mio Cid (Corominas, 1980, III:274). Moreover, all speakers classified it as basic. In the card-sorting task, in which informants were given a set of cards bearing twenty cooking verbs (see No.

I of questionnaire, Appendix I) and were asked to divide them into just two groups, basic and non-basic, all speakers placed it in the basic pile. In the scaling task, in which speakers were given the same verbs (see No. II of questionnaire) and were asked to scale them in order of importance, with 7 for the most important and 1 for the least important and unknown words, nine speakers gave guisar a 7 and only one gave it a 6. Interestingly, guisar (X) is the only basic cooking verb not derived from Latin; it comes from Germanic wisa 'mode, manner', and is thus related to English wise and German Weise.

Cocer X₂ and freír X₁ contrast with each other. Freír is a process calling for oil or some kind of fat as the cooking medium; cocer calls for water or some other liquid. Cocer X₂ has three subordinate terms, hervir X; Ø 'to boil', cocer X a fuego lento 'to simmer', and cocer X al vapor 'to steam', which all contrast in the amount of ebullition the liquid undergoes and in the amount of liquid present. With hervir, the food must be completely submerged and the liquid kept at a rolling boil. With cocer X al vapor 'to steam', the liquid must also be kept at a boil so as to keep the food surrounded by steam at all times, but the food must not touch the liquid. With cocer X a fuego lento 'to simmer', the food is only partially submerged and the liquid is never allowed to come to a boil. Hervir's two subordinate terms, sancochar X 'to parboil' and salcochar X 'to cook in boiling salted water', show dialectal variations. Dictionaries give the meaning of sancochar X as 'partial cooking', similar to that of parboiling, and salcochar X as 'boiling in salted water without any other ingredients'. But for most speakers, sancochar X meant full cooking in water and salcochar was unknown. For the two speakers from Puerto Rico, the two terms function as synonyms, and can be used interchangeably, though one of them felt that salcochar was more learned. Under cocer X a fuego lento 'to simmer', escalfar X 'to poach' can refer only to eggs, and estofar X 'to braise, to pot' only to meats. This limitation in collocational possibilities is in keeping with Lehrer's observation that often a cooking term is used only with certain foods (Lehrer, 1974:166). Cocer X al baño maría 'to cook in a double boiler' refers to the process of placing the dish containing the food inside a larger dish containing enough hot, but not boiling, water to come up to about the level of the food. Desserts such as puddings and custards--for example the well-known flan--are cooked this way. As can be seen, the process can only very loosely be translated as 'to cook in a double boiler', but actually no exact translation is possible. This process can take place on top of the stove or in the oven, so that, in a formal sense, a rigorous taxonomy is not possible here, since there is a violation of the axiom of partition, which proscribes the placement of a subordinate term in two different subsets (see Kay, 1971).

Freír X₁ 'to fry' has five subordinate members: freír X₂ 'to fry', as in English; sofreír X, which means to fry lightly, but is used exclusively for the ingredients of a sauce and the light frying of the sauce itself; refreír X, 'to fry twice, to overfry'; saltear X 'to fry quickly but lightly in a small amount of very hot fat', as in stir-frying, and rehogar X 'to fry lightly, to sauté' which is used

only for dry ingredients. Spanish has no word for deep-frying; recipes merely specify to "fry in abundant oil" when this process is called for.

Asar X 'to roast, to broil' is a process that can take place either in the oven or by direct heat. Before the invention of stoves, it was used only for foods that could be cooked by direct exposure to heat: on a spit, on a grill, or suspended by hooks or strings directly above a fire. Diego Granado's fascinating Libro del arte de cocina, first published in 1599, has countless recipes calling for exactly those procedures. Nowadays, it is used for meats, fish, fowl, small whole animals, and certain vegetables (i.e., for corn, peppers, potatoes, and yams, but not for carrots, turnips, or green beans) whether they are cooked in the oven, on a grill, or on a rotisserie. For some vegetables, asar X can even be done on a griddle, as is the case with peppers and tomatoes; for others, asar X can be done directly on the embers, as with corn and potatoes. Since part of the meaning of asar X is 'cooking in the oven', this word is also partially placed under hornear 'to bake'. The reason for the use of one single term, asar, for what would seem to be at least two different cooking processes is that certain foods (i.e. meat, potatoes) that can be cooked by direct heat don't look or taste appreciably different when cooked by indirect heat, and "the most important parameters of cooking words are those connected with the result" (Lehrer, 1974:166). The three terms under asar X₂ merely divide the semantic space into the three methods commonly used for roasting: espetar X 'to cook on a spit', cocer X a la parrilla and its synonym emparrillar X 'to roast on a grill', and asar X₃ 'to roast in the oven or to broil'.

Hornear (X) 'to bake' means to cook by indirect heat in the oven and is used primarily for bread, pastries, cookies, cakes--all those flour products which, in Spanish, are collectively referred to by the poetic fruta de horno 'fruit of the oven'. (Deep-fried pastries are called fruta de sartén 'fruit of the frying pan'.)

Finally, it might be mentioned that hervir X; Ø 'to boil' is the only verb which has wide usage outside the cooking field. It can be used for such processes as sterilizing, disinfecting, bleaching, the setting of dyes, etc.

Not all the terms in my study were equally well-known to all the informants. Of incompatible terms appearing on the same level of the taxonomy, some were better known than others. For example, estofar X 'to braise' was known to everyone and was even considered basic by some informants, but escalfar X 'to poach' was unknown to all but one. Emparrillar X 'to cook on a grill' and espetar X 'to cook on a spit' were unknown to everyone. Saltear X 'to fry quickly and lightly in very hot fat' was unknown to four informants. Hervir X; Ø 'to boil' and cocer X a fuego lento 'to simmer' were considered basic by all speakers, but cocer X al vapor 'to steam', which is on the same level in the taxonomy, was not.

Some disagreements among speakers appeared to be dialectally determined. For example, sofreír X 'to fry a sauce lightly' was considered basic by the three speakers of Caribbean Spanish: on the numerical scale (No. II of Appendix I) the two speakers from Puerto Rico gave it a 7, and the one from Venezuela a 6. The speaker from

Spain gave it a 4 (but he placed it in the basic group in the card-sorting task, No. I of Appendix I), and the remaining six speakers gave it a 1, the lowest number; five of them marked it as unknown. A taxonomy, then, can be said to reflect not only semantic facts about a language, but dialectal and geographic ones, as well. In fact, language-particular taxonomies can even reflect cultural cooking practices; Lehrer has found that "in cultures in which frying is a common way of cooking, the languages have a separate term for this method" (Lehrer, 1974:165).

On a semantic level, taxonomies display universal characteristics. For example, Lehrer's comparison of cooking-word taxonomies in twelve different languages has yielded two (statistical) implicational universals, as follows:

- I. In general, if a language has at least two cooking words that contrast, then one will be used for boiling; and
- II. If a language has three or more cooking words, in addition to a term for boiling, then the non-boiling domain will be subdivided (Lehrer, 1974:167).

Spanish cooking words support both of these universals. As for universal I, Spanish has more than two cooking words that contrast and one of them is used for boiling; as for universal II, Spanish has more than three cooking words in addition to the one for boiling, and the non-boiling domain is subdivided (see Chart I). This is not surprising, since one of the assumptions of a universal approach to semantic description is that terms may not have exact meanings cross-linguistically, but that they do have "focal meaning that has transcultural validity" (Lehrer, 1974:167). Cross-linguistically, terms in like fields cohere in certain like patterns, Intra-linguistically, they cohere even more concretely.

2. A HYPOTHESIS

One might well ask what it is that makes cooking words cohere in a semantic field. Clearly, they divide the semantic space of food preparation in a certain way. Each word expresses a process in which something is done to food to make it edible or tasty. But verbs like wash, freeze and dress also expressed processes in which something is done to food to make it edible, as in wash the lettuce, freeze the granite, and dress the salad, yet no one would argue that these are therefore cooking verbs. Something other than preparing food is happening.

Suppose we posit a primary term, a word which is semantically contained in all the others. If there is such a word, then it would be the nucleus of the field and would explain its unification and structure, perhaps also the possible acceptance into it of new words entering a language. In Spanish, for the field of cooking verbs, cocer is such a word. It is through the meaning of cocer that the field includes the words it does and excludes others, and it is through cocer that all words in the field are related and can be

defined. One need only state the semantic primes of one single verb per field (a componential approach) and then use that verb as a means of defining all the others (a definitional approach).

R.M.W. Dixon (1971) outlines precisely this kind of combinatory approach to semantic description. He says that, in every language, verbs fall naturally into two groups, nuclear and non-nuclear. Nuclear verbs are those which "must be componentially described, since it appears that they are not susceptible to definition in terms of other nuclear words ..." (Dixon, 1971:441) and non-nuclear ones are those which are susceptible to such definition. He gives look as an example of a nuclear verb, because it cannot be further decomposed into other words, only into primes, and stare as an example of a non-nuclear verb, since it can be defined by means of the nuclear verb plus a definition as look hard.

Dixon bases his conclusions on the unique data provided by Dyirbal, an Australian language of North Queensland, which has a companion "mother-in-law"* language which speakers use in the presence of taboo relatives. These two languages have identical phonology and very similar grammars, but totally different vocabularies. Not a single lexical item is common to both. The "mother-in-law", or marked, language has only one quarter as many words as the unmarked, or everyday, one, yet it can express anything at all that the unmarked language can. Dixon shows that the marked language is made up entirely of nuclear verbs with adverbial definitions, whereas the unmarked one has both nuclear and non-nuclear words, and states that "... the correspondences [between the two languages] provide an immediate rationale for the division into nuclear and non-nuclear verbs; and for the techniques of componential description of nuclear words and of definition of non-nuclear words" (Dixon, 1971:449). It is possible that the same phenomenon obtains in other languages, not to the extent found in Dyirbal, perhaps, but enough so that the combination of componential and definitional approaches constitutes a means of economy in semantic description.

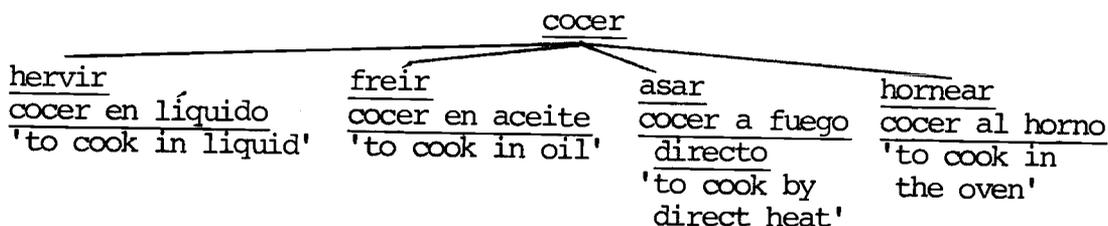
Componentially, cocer can informally be said to be composed of the following features:

cocer

- <PROCESS>
- <IRREVERSIBLE>
- <THROUGH HEAT>
- <FOR EDIBILITY>

This combination of components make clear why achicharrar 'to burn food' (definition: "to burn something, particularly a food, without completely destroying it.") is not a member of the field. Though it is an irreversible process taking place through heat, the resulting mess is not edible. The above componential definition would also explain why escabechar 'to pickle' is likewise excluded from the field: here, the results are edible, and the process is irreversible, but it is not done through heat. In principle, then, any term subsumed under cocer would have to include those four components,

and any subordinate term can be defined in terms of cocer because it includes them:



In Spanish, for the field of cooking words, this approach seems entirely valid. Not only can it be done for analysis and description, but it is also done by speakers, as a matter of preference. Various cooking verbs have periphrastic synonyms employing cocer plus a definition:

salcochar = cocer en agua y sal 'to cook in salted water'

hornear = cocer al horno 'to bake'

emparrillar = cocer a la parrilla 'to cook on a grill'

asar = cocer en el asador 'to roast, to broil'

For still other concepts, a semantically complex, one-word non-nuclear term does not even exist, only the definitional term:

cocer a fuego lento 'to simmer'

cocer al baño maría 'to cook in a double boiler'

cocer al vapor 'to steam'

Even when one-word terms exist, the definitional terms are generally preferred. Cookbooks generally use periphrastic terms in their instructions; speakers also seem to prefer them. In a task where speakers were given several groups of words--most of them pairs, some of which were made up of a periphrastic verb and a non-nuclear one (see No. VI of Appendix I)--and were instructed to state whether the terms in each group had the same or a different meaning, and to mark the terms they preferred to use, informants generally marked the definitional terms. There were nine such possibilities to choose from, times ten informants, this making the number of possible choice total 90. Out of those 90, there were 64 cases of preference for the definitional term, or 71%, and 26 (of which freír and asar accounted for all but one) of instances of preference for the non-nuclear, one-word verbs, or 29%. This is (entirely) in accord with Dixon's observation that "nuclear words tend to have greater frequency than non-nuclear items" and that "in almost every case a certain nuclear word will have greater frequency than non-nuclear words that are related to it" (Dixon, 1971:441).

As for cocinar, cocer's companion at the top of the taxonomy, it seems intuitive to say it is a synonym of cocer. If they are synonyms, then cocinar must have an identical componential makeup

and must be able to substitute for cocer in all definitional terms. And this is, in fact, exactly what happens.

Cocinar is intransitive and can refer to human cooking activity in general. One could try to argue that cocinar refers to any food-preparation activities. But it can be shown that its meaning is far more restricted than that, and in the same way as that of cocer is. For example, in response to the question

- (22) ¿Cocinaste ayer?
Did you cook yesterday?

--the answer

- (23) No, me pasé el día preparando ensaladas.
No, I spent the day preparing salads.

--is perfectly acceptable, but the answer

- (24) Sí, me pasé el día preparando ensaladas.
Yes, I spent the day preparing salads.

--is anomalous. Equally, answers like "I spent the day washing vegetables, pickling cucumbers", etc. would negate the verb of the question, not affirm it. Similarly, if the verb in the question were cocer plus an object instead of cocinar, the same results would hold. In other words, any sentence which excludes cocer also excludes cocinar. The two terms will never contrast semantically in the same context, which is a test for semantic identity (see Kay, 1971). These two verbs have exactly the same components and differ only in transitivity, a phenomenon which Dixon observes in Dyirbal: "... a transitive verb in a mixed transitivity subset is often related to an intransitive verb (in the same subset) by having the same semantic content, and differing only in transitivity" (Dixon, 1971:461).

Thus, cocer and cocinar are synonymous in meaning and differ only in transitivity. They are at the top of the taxonomy and strictly include every term under them, so they are the "unique beginner" (Kay, 1971:). They are also the nuclear verb through which all the other verbs in the field can be defined. It seems convenient to speak of the totality of their components as an abstract entity which is the nucleus of the semantic field of cooking verbs in Spanish and is contained in every verb in the field. All verbs in the field are unified through the four semantic components which are the field's nucleus.

Given that these conclusions seem to be applicable to cooking verbs in Spanish, a further hypothesis would be that other semantic fields are also groups of non-nuclear words which are unified through the combination of semantic primes in the nuclear word which is common to all of them.

3. CONCLUSION

This analysis has shown that cooking verbs in Spanish divide the semantic space at issue in ways which are specific to Spanish and yet are in keeping with what may be posited as certain cooking universals. The field is set up to distinguish among cooking in oil (or other fat), cooking in water (or other non-oily liquids), cooking by direct or indirect exposure to heat, and cooking by steam.

These verbs fall naturally into a semantic field--a natural class, one could say--by virtue of their all sharing the semantic primes inherent in cocer 'to cook', the unique beginner and nucleus of the field. Whereas cocer is nuclear (in the sense put forth by Dixon, 1971), that is, it cannot be defined by any other words but must be broken down componentially into primes, all the other verbs of the field are non-nuclear, since they can all be defined by means of cocer plus an adverbial of place or manner. A combination of componential and definitional analysis thus appears to be a means of achieving descriptive economy in the analysis of this semantic field in Spanish.

Consequently, it appears reasonable to assume that the same type of analysis will prove fruitful in the analysis of other semantic fields in other languages.

APPENDIX I

Name _____ from (country) _____

- I. Divide these cards into two groups, one for all the verbs which you think are basic and one for those which you don't think are basic or don't know:

Basic

Non-basic

(The cards contained the following verbs:

ESCALFAR 'to poach (eggs)' HORNEAR 'to bake' GUI SAR 'to cook'
 CO CER 'to cook' FREIR 'to fry' ESTOFAR 'to braise'
 SOFREIR 'to fry lightly' HERVIR 'to boil' ASAR 'to roast'
 COCINAR 'to cook' CO CER A FUEGO LENTO 'to simmer'
 REFREIR 'to refry' CO CER AL BAÑO MARIA 'to cook in a
 double boiler' SOASAR 'to roast lightly' SALCOCHAR 'to
 cook in water and salt' CO CER A LA PARRILLA 'to roast on a
 grill' CO CER AL VAPOR 'to steam' SANCOCHAR 'to parboil'
 SALTEAR 'to saute at high heat' AHORNAR 'to bake incompletely')

- II. In the following list of verbs, which do you consider the most important? Scale them according to their grade of importance, giving 7 points to the most important ones and 1 to the least important or unknown ones:

- | | |
|-------------------------|---------------|
| () ahornar | () estofar |
| () asar | () freír |
| () cocer | () guisar |
| () cocer a fuego lento | () hervir |
| () cocer a la parrilla | () hornear |
| () cocer al baño maria | () refreír |
| () cocer al horno | () rehogar |
| () cocer al vapor | () salcochar |
| () cocinar | () saltear |
| () emparrillar | () sancochar |
| () escalfar | () soasar |
| () espetar | () sofreír |

III. Fill each blank with an adequate cooking verb:

1. A. María se pasó toda la tarde _____ sopa.
 B. _____ la cena.
 C. _____ carne.
 D. _____ la comida.
 E. _____ tamales.
- A. Mary spent the whole afternoon _____ soup.
 B. _____ supper.
 C. _____ meat.
 D. _____ dinner.
 E. _____ tamales.
2. A. A Carmen le gusta _____ la cebolla y el tomate.
 B. { A Carmen le gusta _____ } los huevos.
 C. { A Carmen le gusta _____ } con vino.
 D. { A Carmen le gusta _____ } los domingos.
 E. { A Carmen le gusta _____ } galletas y pasteles.
- A. Carmen likes to _____ onions and tomatoes.
 B. _____ eggs.
 C. _____ with wine.
 D. _____ on Sundays.
 E. _____ cookies and pies.
3. A. Es muy fácil _____ frijoles.
 B. _____ verdura.
 C. _____ la carne de puerco.
 D. _____ pescado.
 E. _____ tallarines.
- A. It's very easy to _____ beans.
 B. _____ vegetables.
 C. _____ pork.
 D. _____ fish.
 E. _____ pasta.
4. A. La mejor manera de preparar los huevos es _____ los.
 B. las chuletas es _____ las.
 C. los camarones es _____ los.
 D. el flan es _____.
 E. el pollo es _____ lo.
- A. The best way to prepare eggs is to _____ them.
 chops
 shrimp
 flan
 chicken

IV. Put an "X" in the parentheses next to any incorrect sentences:

- () Voy a ponerme a guisar.
 () { Voy a ponerme a } freír.
 () { Voy a ponerme a } cocinar.
 () { Voy a ponerme a } cocer.
 () { Voy a ponerme a } hervir.
 () { Voy a ponerme a } asar.
 () { Voy a ponerme a } hornear.

- () I'm about to start to cook.
 () fry.
 () cook.
 () cook.
 () boil.
 () roast.
 () bake.

- V. 1. What cooking processes do you use at home?
 2. How about on holidays?
 3. And what processes were used at your home when you were a child?

VI. Give the Spanish equivalents, if you know them, of the following phrases:

- | | |
|------------------------------|--------------------------|
| 1. cooking with solar energy | 6. cooking with charcoal |
| 2. microwave cooking | 7. a well-done steak |
| 3. cooking with electricity | 8. a medium steak |
| 4. pre-cooked | 9. a rare steak |
| 5. cooking with gas | |

VII. In each of the following pairs or groups of phrases, put a "D" next to them if you think their meaning is different and an "S" if you think they are synonyms. If you think they are synonyms but one is better than the other one, mark the better one with an "X":

- | | |
|---------------------------|---------------------------|
| — () cocer al vapor | — () sancochar |
| () hervir al vapor | () medio cocer |
| — () cocer al baño maría | — () cocer a fuego lento |
| () hervir al baño maría | () hervir a fuego lento |
| — () salcochar | — () asar |
| () cocer en agua y sal | () cocer en el asador |

— () cocinar — () cocer — () cocinar — () guisar
() guisar () guisar () cocer () cocinar
() cocer

— () cocer al horno — () freír
() hornear () cocer en aceite (o manteca)

— () cocer a la parrilla
() emparrillar

NOTE

*Dixon refers to the marked system as a "language"; at least one other linguist, however (Ferguson, 1982, p. 59) has referred to it as a "register".

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