PLANNING AS A MENTAL PROCESS
AND ITS LEXICAL EXPRESSION IN ENGLISH AND SPANISH

The aim of this paper is to study the semantic domain which encompasses the mental process of 'planning' and the way in which this mental process is expressed by lexical units.

This study is based on some of the theoretical foundations of the functional-lexematic model as expounded by L. Martín Mingorance (1984, 1990), that integrates two descriptive models: Structural Lexematics, developed by Coseriu (1973, 1977) and Geckeler (1971), and Dik's Functional Grammar (1978, 1989). Both models of analysis are complementary, since "they are based on complementary views of functionality" (L. Martín, 1990: 240). Lexematics, "an essentially paradigmatic model of lexical analysis" (L. Martín, 1990: 240), provides information of lexical field structure, organization in dimensions and subdimensions, analysis of distinctive features, isolation of archilexematic units, semes and classemes. On the other hand, Dik's Functional Grammar "provides a highly-structured development of the syntagmatic aspect of lexical units" (L. Martín, 1990: 240). In FG, each lexeme or basic predicate is represented in the lexicon by means of a predicate-frame, which contains information about its lexical form and category, its quantitative valence or number of arguments associated with the predicate, its qualitative valence, that is, the selectional restrictions and semantic role of each argument, and the state of affairs (basically actions, positions, processes and states) denoted by each predicate according to a set of semantic parameters (dynamism, control, experience, etc.) (Dik, 1989: 91-99). As for the lexico-semantic definition of predicates, which is called the 'definiens', the method of 'stepwise lexical decomposition' "interrelates predicates sharing some semasiological space in a hierarchical order" (M. Morillas, 1986: 23), from more specific to more generic terms or vice versa. "The lower predicates are defined by means of the term immediately superordinate to them, plus a specification, generally expressed by means of an adverbial phrase" (L. Martín, 1984: 228).

An analysis of the English (L1) and Spanish (L2) verbal predicates that belong to the core of this semantic domain is carried out at both syntagmatic and paradigmatic levels and includes semantic, syntactic and functional information for each predicate. This analysis is made at both intralinguistic and interlinguistic levels and the final aim is to point out the main differences and similarities that are settled between both languages.

Before proceeding to the analysis of the lexical units it is necessary to mark the boundaries of this semantic domain in relation to other mental processes. Obviously, it belongs to a larger semantic field, the one that contains all the cognitive processes that take place in the human mind. It is not an easy task to settle clear-cut differences among the dimensions of this lexical field, because this would mean to structure the cognitive processes in a systematic way. The

complexity of the lexical units that express mental processes has been recognized by several linguists (Lehrer, 1974: "hard predicates", Snell-Hornby, 1983: "hard words") and it reflects the fuzzy borders that are established between language and cognition, since both, language and cognition, can be conceived of as an indissoluble unit. Even though, we find through our analysis that the group of predicates that express the mental process of 'planning' shares a set of distinctive features in opposition to the predicates that express other ways of thinking.

The Collins Cobuild Dictionary defines 'planning' as 'the process of deciding in detail how to do something before you actually start to do it'. According to this definition, we can say that 'planning' is a process of "thinking in detail about something that you have the intention to do afterwards".

In opposition to other ways of thinking, as for example the retrospective process of remembering or unconscious processes like 'fantasy' or 'dream', 'planning' can be defined as 'a creative prospective process that takes place in the human mind', and it entails a rational and reflective way of thinking. Consequently, all the predicates that belong to this semantic dimension share a set of distinctive features that are inherent in them and isolate them from the rest of the predicates that express mental processes. These features are:

> (rational process) + (reflection) + (orderly) + (in detail) + (prospective: intention to fulfil something in the future)

After this information, the state of affairs of these predicates can be classified as an Action:

State of affairs:
Action (Mental Activity): [+exp] [+dyn] [+con]

[+exp]	because the state of affairs is obtained through the mental faculties of an animate entity (Dik 1989: 98).
[+con]	because it implies a conscious mental effort made by a human subject, who acts as a controller of the state of affairs.
[+dyn]	because it entails a mental activity: a process of thinking, reflecting and meditating.

In fact, as regards the state of affairs, these lexical units can be considered as a bridge between 'mental activities' and 'accomplishments', since the mental activity is oriented to a specific aim <to fulfil sth. in the future>, but it does not imply that this aim is going to be fulfilled. In this sense, the generic verb PLAN is classified by Miller (1976: 470) as an 'intentive verb', which is frequently used in combination with causatives, but does not necessarily entails a result. As he says, the sentence "Bruce planned to kill Sid" does not entail that Bruce caused Sid to die.

> ... Indeed, there is an implicature that Bruce did not fulfil his intention or succeed in his attempt... Semantically, intentive verbs are notoriously opaque, because the truth or falsity of statements expressed by sentences containing such verbs does not depend

on the truth or falsity of the statements expressed by the complements of the verbs... What is odd in the sentence "Mason planned to get a stone to die" is not so much its truth of falsity, or even its status as a grammatical sentence, as Mason's *state of mind*... The constraints on what people may intend to do certainly do not exclude the impossible or nonsensical... What seems odd or reasonable for someone to intend to do depends on a complex system of beliefs, not on linguistic rules... PLAN sth. implies intention and not necessarily the execution of a plan and the opacity is a consequence: as long as the outcome is uncertain, its value cannot affect the truth of the sentence as a whole". (Miller, 1976: 470-471).

These lexical units contain the semantic verbal classemes +dynamic, ±resulting, +durative. They all constitute dyadic predicates, with two arguments, an 'Agent' human subject and a mental object <plan or project> with the semantic role of 'Effected Goal', since this plan or project is the result of the subject's mental activity.

ACTANTS:

x_1 [+H]Ag
x_2 [+CONCR][-PHYS]: <plan / project>Effected Goal

(L1): There is a group of verbal predicates that express a general process of planning:
PLAN, PROJECT, DESIGN, PROGRAMME, PREMEDITATE.

The verb PLAN is the most generic term and consequently it functions as the archilexematic unit of the dimension. This predicate can be defined gradually from the more generic or superordinate verb THINK ('develop a mental activity'):
The predicate-frame would be:

$PLAN_V$: [$(x_1$: <+human>(x_1))$_{Ag}$ $(x_2$: <+concr>(x_2))$_{Goal}$]Act / Pro

$= df$ [$THINK_V$: $(x_1)_{Ag}$ $(x_2$: <plan / proyect>(x_2))$_{Goal}$

$(y_1$: AdvP <orderly & in detail>(y_1))$_{Manner}$

$(y_2$: AdvP <aim: to fulfil it afterwards>(y_2))$_{Purpose}$]Acc

"Think orderly and in detail the way to fulfil something"

The rest of the predicates above mentioned are more specific. They all share the generic predicate PLAN which functions as "definiens" or hyperonymic defining verb, but are opposed by distinctive features, mainly represented by means of circumstantial specifications or pragmatic restrictions:

PROJECT: BE PROJECTED

"PLAN + to happen in the future" <rather formal & restricted to the passive voice>

DESIGN:

"PLAN + according to a mental picture"

PROGRAMME:

"PLAN <a machine / system / activity>(Specific Object) +through a set of ordered and detailed instructions"

PREMEDITATE: BE PREMEDITATED

"PLAN <an action>(Specific O). +very carefully +beforehand, (+taking into account possible advantages and disadvantages)" <rather formal and restricted to the passive voice>

PREMEDITATE can be considered as a bridge between 'reflecting or meditating' and 'planning': PRE ('in advance') + MEDITATE ('deep reflection') + PLAN ('orderly, deliberately, in order to carry out an action'). It frequently, but not necessarily, has a negative connotation, and in this case the object is restricted to nouns as 'crime' or 'murder'.

(L2): The central lexemes are:

PLANEAR, PLANIFICAR, PROYECTAR, DISEÑAR, PROGRAMAR, PREMEDITAR.

The generic predicate PLANEAR, defined as "IDEAR ordenadamente el modo de llevar a cabo algo", acts as archilexemic definiens. The differentiation features of the rest of the predicates are stated as follows:

PLANIFICAR:

"PLANEAR +sobre temas específicos +detalladamente"

PROYECTAR:

"PLANEAR / + TENER la intención de hacer algo en el futuro, tener en mente"

DISEÑAR:

"Planear + en base a una imagen mental"

PROGRAMAR:

"PLANEAR <actividad / máquina>(Specific O.) +mediante una serie de instrucciones concretas"

PREMEDITAR:

"PLANEAR <una acción>(Specific O.) +cuidadosamente, +de antemano" <usu. +negative connotation, Object: crimen, asesinato... >

As for the *contrast* between both languages, generally we find that there is a one to one correspondence except for the verbs PROYECTAR and PLANIFICAR.

- In opposition to BE PROJECTED <passive>, the Spanish PROYECTAR is frequently used in the active voice:

(L2) "Proyectan un viaje" =
(L1) "They are planning / thinking of (*projecting) a trip".

- There is not an equivalent English verb for (L2) PLANIFICAR (= PLAN +in detail). This is a case of interlingual asymmetry:

(L1) PLAN / (L2) PLANEAR, PLANIFICAR.

- As for the Spanish PROGRAMAR, the English equivalence is made in specific contexts by means of specific verbal lexemes as SCHEDULE or TIMETABLE, usually passive, for example "The meeting is timetabled / scheduled for 3 p. m.".

There is a group of predicates in both languages that share a common seme or distinctive feature: *<in order to harm or profit>>*(Purpose), and they constitute a *subdimension* within this semantic domain. These lexemes contain a *negative meaning* and they can be gradually defined from the generic terms (L1) PLAN and (L2) PLANEAR with negative specifications represented by restrictions in the object <sth. secret, hidden, against s. o. > and circumstances <in one's own benefit, etc. >.

(L1): The central English lexemes to this subdimension are:
PLOT, SCHEME, MASTERMIND.

According to the definitions given by the Collins Cobuild Dictionary, which include 'factor-ization', these verbs can be differentially defined as follows:
PLOT:

"PLAN <usually sth. illegal or wrong>(Specific O. >, +secretly, +cunningly, +especially against a person or government."

> The subject contains the classeme [+collective] because it usually refers to a group of people.

SCHEME:

"PLAN + surreptitiously + in order to gain sth. for oneself or for s. o. else + esp. by deceiving others" <used showing disapproval>

The semantic difference between both predicates is based on three main points:
- SUBJECT (x_1): PLOT (plural: a group of people) / SCHEME (singular: one person).
- OBJECT (x_2): PLOT (sth. official), restricted to nouns as <strike, murder, rebellion, revenge... >, or <against a king, the government, etc. > / The object of SCHEME does not present this restriction.
- AIM: PLOT <in order to harm> / SCHEME <in order to gain something, on one's own benefit> and it does not necessarily entails 'harming someone'. e. g.:
"They were plotting a strike / against the king"
"She frequently schemed on her daughter's behalf"

MASTERMIND:

"PLAN <a difficult or complicated activity>Specific O. +in detail, +and make sure that it happens successfully".

> In this case, the negative connotation is specified both in the subject $<(x_1)$: often a criminal or a thief (the "brains" of a gang)> and the object $<(x_2)$: a big robbery, attack... >.

(L2): TRAMAR, URDIR, MAQUINAR.

These predicates gather around the common feature 'con sigilo y astucia'.

TRAMAR:

"Planear + con sigilo y astucia, + normalmente con mala intención."

> This is the most generic term among these predicates, and consequently it functions as 'definiens' for the other two verbs. However, sometimes it is used in contexts which do not imply 'bad intention', as in the sentence "Están tramando una sorpresa para su madre" (María Moliner).

URDIR:

"Tramar <una intriga, lío o chisme>Specific O." (M. Moliner) <rather metaphorical>

MAQUINAR:

"Tramar <algo complicado>Specific O. +subrepticiamente, +para dañar a alguien o para obtener poder" <the most negative term>

The *contrast* L1 / L2 within this subdimension is made by means of partial equivalences or lexical gaps. According to the previous analysis in distinctive features, we cannot talk about a one to one correspondence between (L1) PLOT / SCHEME and (L2) TRAMAR / URDIR. So the equivalences can be made by means of different predicates according to the specific context:

> - PLOT / SCHEME are partially equivalent to TRAMAR, URDIR, FRAGUAR <metaphorical> or in specific contexts verbs of action as CONSPIRAR or INTRIGAR (in the sense of 'Urdir un complot contra alguien').
> - TRAMAR / URDIR are partially equivalent to PLOT, SCHEME, the phrasal verb COOK UP <colloquial> or the metaphorical uses HATCH and WEAVE.
> - As for (L2) MAQUINAR, there is an equivalent English verbal lexeme, MACHINATE, but it is an old-fashioned word, not used. For the equivalence, the more generic lexemes PLOT and SCHEME and the phrasal verb COOK UP <colloquial> can be used.
> - Finally, there is not an equivalent Spanish lexeme for (L1) MASTERMIND. This is a case of 'lexical-item gap' or 'synthetic versus analytic correspondence'. Therefore, the equivalence is made by means of a periphrastic expression: SER EL CEREBRO DE.

As regards the syntactic construction, all the Spanish predicates are transitive verbs with a direct nominal object. They all share the common divalent pattern SUBJECT + VERB + DIRECT OBJECT. The object is usually as noun. e. g.: "planear o proyectar un viaje, planificar o programar una serie de actividades, premeditar una acción, diseñar un crimen, tramar o urdir un complot, maquinar un asesinato".

PLANEAR and PROYECTAR also admit a non finite clausal object: e. g.: "Planean visitarnos, proyectan hacer un viaje".

As for the English predicates, most of them share the same prototypical syntactic pattern: S+V+Od. e. g. "to plan a trip or to plan to visit somebody, to program a computer, to design a crime, to plot a strike, to mastermind a terrorist attack, etc.". The verb PLAN also admits a prepositional object (S+V+OPrep) as in "I'd planned *on* doing some work tonight", and some of these predicates can also be used as intransitive with an adverbial complement (S+V+A) as PLOT "To plot *against* the government" or SCHEME: "To scheme *on* one's benefit".

Through the study of this semantic domain and its central verbal lexemes I have tried to show the interrelation between language and cognition in both languages. As we have seen, all the verbs analysed are dyadic predicates with two actants, a human subject and a mental object, and they share the same state of affairs, the same semantic verbal classemes and a similar syntactic structure. As for the interlinguistic contrast, although there are some differences, as in the number of predicates, partial equivalences, lexical gaps, voice restrictions or some pragmatic oppositions, we find a strong similarity at all levels (formal, functional, semantic and syntactic) which reveals a parallel structure for both languages.

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