k is eating (something). Fiona is

:e article) Violet is the lead ballerina : (containing an indefinite article) s (Violet, lead ballerina) are being :) is said to belong to an abstract

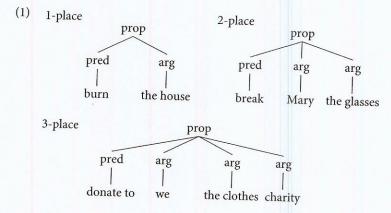
lex transitive (put, donate, crawl),

It is snowing. It felt chilly.

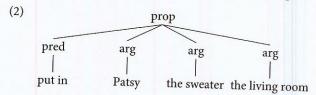
The bird flew away.
The child choked.
Sam is depressed.
Violet is a dancer.

The carpenter sanded the desk.
The news surprised us.
The teacher is upset with him.
Violet is the lead ballerina.
The coat is behind the door.
He pressed the papers flat.
The witch looked into the cauldron.

The predicate and argument(s) of a proposition may be represented in tree diagrams, as follows:



Note that arguments include only the nuclear elements of sentences, not adverbial elements. Thus, in the sentence *Patsy is knitting a sweater in the living room*, "in the living room" is not an argument (because *knit* is a transitive verb), while in the sentence *Patsy put the sweater in the living room*, "in the living room" is an argument (because *put* is a complex transitive verb). The second sentence is a single 3-place predicate:



(An analysis of the first sentence is given in the Self-Testing Exercise.)

Now that propositions have been analyzed into the predicate and argument(s), we can examine how these parts are related semantically.

Self-Testing Exercise: Do Exercise 10.1.

2. Thematic roles

The concept of thematic roles (or θ -roles) is a means of accounting for the functions of arguments in respect to the predicate; thematic roles are the "grammatically relevant semantic relations between predicates and arguments" (Frawley, 1992, p. 201). This approach was first proposed by Charles Fillmore (1968; 1977) and was originally known as "case grammar". To define the roles of arguments, Fillmore borrows the notion of case used in the analysis of grammatical categories, but applies it in a slightly different way.

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of Modern English Renjunities
2010

2. Traditionally, it is also unclear whether the notion of case should be restricted to case inflections – what is known as *morphological case* – which are used almost exclusively in a synthetic language, or should embrace other formal means to express the same grammatical functions, namely periphrases (using prepositions) and word order, which are the primary means for the expression of case in an analytic language such as English.

Since languages seem to make use of various surface forms for the same grammatical function and to express the same grammatical function with different surface forms, Fillmore decides to use *case* in a new way: to indicate "semantic case" or the underlying semantic-syntactic functional relationships. He conceives of these semantic cases as finite in number and universal, not language specific, much like semantic features. They are a matter of D-structure, while their formal marking is a matter of S-structure.

This approach to the function of noun phrases offers certain advantages over the purely structural approach of syntactic analysis (as we undertook in Chapters 7–9). In this approach, case refers to the position of a noun phrase in D-structure; thus, the "subject" is the NP to the left of the verb or directly dominated by S, while the "direct object" is the NP to the right of V or directly dominated by VP. As is obvious from the terms "right" and "left", these relations are considered for SuVO word order only. While the structural approach could be modified to account for other word orders, such as SuOV, VOSu, and OVSu, where O is adjacent to V, it would be more difficult to account for VSuO or OSuV. Case grammar abandons the idea that noun phrases are ordered in the base; rather, it sees them as assigned a particular surface position according to their thematic role.

Another advantage of case

The chef roasted the mu The fire roasted the me The meat roasted (over

is a purely structural approac

roast ____NP (P

the case grammar, it is possib thematic roles, which then a While Fillmore envisage general agreement on the in nitions. Despite the fact tha "Intuitionism run wild" (name of the possible themat

- Agent: the animate init volition, takes responsi
- Instrument: the mean used to carry out an a (Agent, Force, and Ins
- 1. Experiencer: the anin
- Source: the place-from
- Goal: the place-to-who jects and directionPath: the path taken
- N. Location: the place-ε
- the possessor must c the possessor and the (inalienable possess)

^{1.} A synthetic language is one such as Latin or Old English, in which grammatical categories are expressed primarily by inflection. In contrast, a synthetic language such as Modern English or French expresses grammatical categories with a few inflections, but primarily through word order and periphrasis.

^{2.} Many of these thema "actor", Instrument is kno Location as "place" or "tem or "theme", Neutral as "the

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ich grammatical categories such as Modern English or marily through word order

Another advantage of case grammar is that it is able to recognize a relationship among sentences such as the following:

The chef roasted the meat (over the fire). The fire roasted the meat. The meat roasted (over the fire).

In a purely structural approach, we would need to postulate three separate verbs roast with similar semantic features but different subcategorization rules:

roast NP (PP) NP __ (PP)

In case grammar, it is possible to see the three instances as a single verb selecting certain thematic roles, which then appear in different surface syntactic positions.

While Fillmore envisages a finite number of universal thematic roles, there is not yet general agreement on the inventory of these roles, on their designations, or on their definitions. Despite the fact that determination of thematic roles is described by one scholar as "intuitionism run wild" (Dillon, 1977, p. 73), we may consider the following as a list of some of the possible thematic roles served by arguments in a sentence:2

- Agent: the animate initiator, causer, doer, or instigator of an action who acts by will or volition, takes responsibility for the action, and is its direct cause;
- Force: the inanimate cause of an action, which does not act by will or volition;
- Instrument: the means by which an event is caused, or the tool, generally inanimate, used to carry out an action; an instrument does not act but is acted upon; (Agent, Force, and Instrument together could be considered "Cause".)
- Experiencer: the animate being affected inwardly by a state or action; 4.
- Source: the place-from-which or person-from-whom an action emanates;
- Goal: the place-to-which or person-to-whom an action is directed, including indirect objects and directional adverbs;
- Path: the path taken in moving from one place to another in the course of an action;
- Location: the place-at/in-which or the time-at-which an action occurs;
- Possessor: the possessor of a thing, really a special kind of locative, since the thing and the possessor must coincide; there are two kinds of possession, depending on whether the possessor and the thing possessed are inherently connected, such as Judy's head (inalienable possession) or not, such as Judy's car (alienable possession);

Many of these thematic roles have alternative names: Agent and Force are also known as "actor", Instrument is known as "means", Experiencer as "dative" or "affected", Goal as "recipient", Location as "place" or "temporal", Factitive as "result" or "effected", Patient as "affected", "object(ive)", or "theme", Neutral as "theme", and range as "extent".

- 10. **Benefactive**: the person or thing for which an action is performed or the person who derives something from the actions of another;
- 11. Factitive: the object resulting from an action or state, having no prior existence but coming about by virtue of the action or state;
- 12. Patient: the person or thing affected by an action, or the entity undergoing a change
- 13. Theme: the person or thing which undergoes an action, or that which is transferred or moved by an event but otherwise unchanged;
- 14. Neutral: the person or thing which is not changed or even acted upon, but simply present at an action:
- 15. Range: the specification or limitation of an action; and
- 16. Role: a person playing a role or part in an action or state.

HINT: Note the differences between Patient, Theme, Neutral, and Factitive:

Jane broke <u>the vase</u>. (Patient) Jane moved <u>the vase</u>. (Theme) Jane saw <u>the vase</u>. (Neutral) Jane made <u>a vase</u>. (Factitive)

A Patient is changed in some way by the action, while a Theme is affected by the action, often by changing location, but is itself unchanged. A Neutral is present at the event but does not undergo an action. A Factitive comes about by virtue of the action itself.

2.1 The expression of thematic roles in English

Each underlying thematic role is expressed in a variety of ways on the surface in English, including case inflection, function word, and word order. In Table 10.2 are examples of the most common ways in which the different cases are expressed syntactically.

Both Agent and Force are generally expressed as the subject of an active sentence or in the *by*-phrase of a passive sentence and only rarely as object. Instrument is most often expressed in a *with* or *by* phrase. Experiencer is normally the subject of a state verb. The roles of Source, Goal, Path, and Location are normally expressed prepositionally: Source typically with *from*, *out of*, or *off*, Goal with *to*, Path with *via*, *along*, or *over*, and Location with *on*, *in*, *over*, *behind*, or *under*. However, Goal is a complex role including indirect objects (occurring in three different positions in the sentence) as well as locative goals and directional adverbs.

HINT: Note that the expression of inalienable possession is more varied than the expression of alienable possession. In fact, the only meaning attributable to *The brown hair belongs to her* or *The brown hair is hers* is one of alienable possession – perhaps one of her hairs has fallen into the soup!

Table 10.2. The Syntactic Ex

AGENT

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INSTRUMENT

EXPERIENCER

NOURCE

GOAL

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LOCATION

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ject of an active sentence or ct. Instrument is most often e subject of a state verb. The ssed prepositionally: Source along, or over, and Location plex role including indirect as well as locative goals and

sion is more varied than the ning attributable to The brown able possession – perhaps one

Table 10.2. The Syntactic Expression of Thematic Roles in English

| AGENT | The logger felled the tree. |
|-------------|---|
| | The tree was felled by the logger. |
| FORCE | The wind felled the tree. |
| | The tree was felled by the wind. |
| | The logger felled the tree with a single blow. |
| INSTRUMENT | The tree was felled with an axe. |
| | The sweater was knitted by hand. |
| | He used an axe to fell the tree. |
| | <u>Liquor</u> killed him. |
| | His insights impressed us. |
| | He impressed us with his insights. |
| EXPERIENCER | Marianne is lonely/ feels lonely/ is suffering. |
| | I like the book. |
| | The news pleases me. The news enraged me. |
| | The news is pleasing to me. |
| SOURCE | I got the book from the library. |
| | I got some money out of the bank. |
| | The child took the book off the shelf. |
| | I borrowed the book <u>from my teacher</u> . |
| | His leaving pleases me |
| | ('is a source of pleasure to'). |
| | The sun gives off heat. |
| | A caterpillar turns into a butterfly. |
| | The plane left (from) Boston. |
| GOAL | I sent a card to my grandmother. |
| | I sent my grandmother a card. |
| | My grandmother was sent a card. |
| | My grandmother got a card from me. |
| | She reached the coast. |
| | I sent the package to Europe. |
| | A new idea came to me. |
| | We hung the picture on the wall. |
| | Susy jumped onto the step. |
| | I sent the child home. |
| | I walked <u>upstairs</u> . |
| | She did it {for love, to gain attention). |
| PATH | Hannibal traveled over the mountains. |
| | We walked along the railroad tracks. |
| | The package came via London. |
| OCATION | The dog is in the house on the chair under |
| | the table/behind the couch. |
| | I will return on Tuesday/ at noon. |
| | There are many people in the room. |

(Continued)

The room has many people in it. That bottle contains alcohol. People filled the room. Vancouver is a rainy city.

POSSESSOR

RANGE

ROLE

He has/owns/possesses a dog. alienable:

The dog belongs to him. The dog is his.

The jewels are in his possession. That dog of his is a nuisance.

His dog is a nuisance.

The man with the dog/ who has the dog ...

She has/?owns/?possesses brown hair. inalienable:

?The brown hair belongs to her.

?The brown hair is hers.

?The brown hair is in her possession. That brown hair of hers is beautiful.

Her brown hair is beautiful. The man with the brown hair. The man who has brown hair

Jack answered the phone for José. BENEFACTIVE

The store special-ordered the book for me. The maitre d' reserved a place for our party.

They formed a circle. FACTITIVE

Sir Christopher Wren designed St. Paul's.

The coach turned into a pumpkin.

He baked a cake.

I baked the chicken. PATIENT

The chicken was baked by me.

The chicken baked in the oven.

I put the letter on the table. THEME

The letter flew out of the window

We read the letter.

The house costs a lot. NEUTRAL

The table measures three feet by three feet.

Richard saw a tree on the horizon.

The dress costs a hundred dollars.

The man weighs 80 kilograms.

We drove ten miles. He hummed a silly tune.

He lived out his life happily.

We made Lise treasurer of the club.

Hilda is the principal of the school.

Benefactive should r for phrase: Benefactive is animate Goal may under unswered José the phone by the noun phrase imn Patient, and Theme, but 1 they can become the sul dred dollars is cost by th Role is denoted by subje

There appears to be tion. Fillmore (1968) p this says that if Agent is Patient will be subject. in subject position who marked option, as in th

2.2 Dual thematic

Often an argument m ments of certain classe

1. With verbs of m travel, an animate

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The subject both changes location fall, slip, slide, or

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Here Jack may h Agent and Ther that simply befel Agent). The seco

2. Ditransitive ver award, issue, sh

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^{3.} The subject hier formulation is Agen

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esigned <u>St. Paul's</u>. <u>pumpkin</u>.

by me. ne oven. able.

e window

ee feet by three feet. he horizon.

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ne. appily. er of the club. of the school. Benefactive should not be confused with Goal, though they are both expressed in a for phrase: Benefactive is paraphrasable with 'in the place of' or 'in the stead of', and only animate Goal may undergo indirect object movement (note the ungrammaticality of *Jack answered José the phone). While Factitive, Theme, Patient, and Range are all expressed by the noun phrase immediately following the verb in an active sentence, only Factitive, Patient, and Theme, but not Range, are what are traditionally known as direct objects since they can become the subject in a passive sentence (note the ungrammaticality of *A hundred dollars is cost by the dress). Neutral is expressed by both subjects and direct objects. Role is denoted by subject and subject or object complements.

There appears to be a hierarchy among thematic roles in their filling of subject position. Fillmore (1968) proposed a "subject hierarchy" of Agent > Instrument > Patient; this says that if Agent is present, it will be subject, then Instrumental will be subject, then Patient will be subject. Choices of subject which violate this hierarchy, such as a Patient in subject position when an Agent is expressed in the same sentence, always represent a marked option, as in the case described, the passive.

2.2 Dual thematic roles

Often an argument may have more than one thematic role. Dual roles occur with arguments of certain classes of verbs:

1. With verbs of motion, such as *run*, *walk*, *swim*, *wade*, *climb*, *stand up*, *roll over*, or *travel*, an animate subject is both Agent and Theme:

<u>Lucille</u> sat down. Lucille = Agent and Theme

The subject both performs an intentional action (sitting) and is acted upon, that is, changes location (from standing to sitting). However, some verbs of motion, such as fall, slip, slide, or sink, may be ambiguous in respect to thematic role:

<u>lack</u> {fell down, slipped over the edge, slid down the slope}.

Here Jack may have intentionally performed these actions (in which case *Jack* is both Agent and Theme), but another interpretation of the sentences is that these are events that simply befell Jack, without his being responsible (in which case *Jack* is Theme but not Agent). The second reading is obvious if one inserts "accidentally" in the sentences above.

2. Ditransitive verbs and related verbs such as give, sell, lend, hire, rent, supply, furnish, award, issue, show, or tell show the following thematic structures:

<u>They presented an award to Sam.</u> They = Agent and Source Sam = Goal

award = Theme

^{3.} The subject hierarchy has been formulated in different ways by different scholars. Another formulation is Agent > Benefactive > Theme/Patient > Instrument > Location.

They presented Sam with an award.

They = Agent and Source

Sam = Theme and Goal

award = Neutral

In each case, the subject is both an Agent performing the action of presenting and the Source of the award, while the indirect object, Sam, is the Goal of the award in the first sentence. However, since the position immediately following the verb seems to be closely associated with the Theme (or Patient) role, the movement of the indirect object to this position in the second sentence makes it Theme as well, or part of what the sentence is "about", as we will see in the next chapter.

3. Verbs such as spray, cram, pile, stack, smear, mark, engrave, or plant, show the following thematic structures:

She sprayed paint on the wall.

She = Agent

paint = Patient

wall = Location

She sprayed the wall with paint.

She = Agent

the wall = Patient and Location

paint = Theme

Again, the position directly following the verb seems to correlate with the Patient role. The second sentence has a strong implication of 'completeness' or 'total affectedness', that is, that the wall is completely covered, since the wall is not only Location but also Patient in this case - the thing affected by the action - whereas in the first sentence the wall is merely Location.4 Further evidence that the sense of 'total affectedness' is associated with the role of Patient or Theme is provided by sentences such as the following, in which the relevant argument is in subject position:

Bees swarmed in the garden.

the garden = Location

The garden swarmed with bees.

The garden = Location and Patient

The second sentence likewise has the implication of completeness. Note that not all verbs (with similar meanings) permit both variants. For example cover or fill allow only the first, while put allows only the second:

She {covered the wall with a quilt, filled the glass with water}.

*She {covered a quilt on the wall, filled water into the glass}.

*She put the wall with a quilt.

She put a quilt on the wall.

Verbs like steal, take, b following thematic str

The thief stole

The thief stole

cf. The thief robl

While the thief is Agent a lead to different focuses, all these verbs, then, the the verb is to give the not may have.5 A final exampl constructions:

<u>Howard</u> jumped <u>tl</u>

We made Alexana

In the first sentence, the h jumping (hence Agent); th of intentional action. Note Theme, not Agent. In the: Theme) but is also the bein

Dual roles also come thematic role by virtue of virtue of being the subjec

Susan forced Katy

(Actually, it is PRO in the fine point here.) In conti

This sense of completeness seems to hold up even when the sentences are passivized (suggesting that thematic roles are assigned at D-structure, before arguments are moved): The wall was sprayed with paint (completive) vs. Paint was sprayed on the wall (noncompletive).

^{5.} Patient supersedes Neu assumes the Patient role an

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ess. Note that not all verbs r or fill allow only the first,

r}.

entences are passivized (sugents are moved): *The wall was* encompletive).

4. Verbs like *steal*, *take*, *borrow*, *rent*, *hire*, *snatch*, *grab*, *get*, *rob*, *strip*, and *empty* allow the following thematic structures:

<u>The thief stole her jewels.</u> The thief = Agent and Goal

her = Possessor jewels = Theme

The thief stole the jewels from her. The thief = Agent and Goal

her = Source jewels = Theme

f. The thief robbed her of the jewels. The thief = Agent and Goal

her = Theme and Source

jewels = Neutral

While the thief is Agent and Goal in all of these sentences, note that the three structures lead to different focuses, depending on the thematic roles of the other arguments. With all these verbs, then, the effect of moving a word to the position immediately following the verb is to give the noun the role of Patient or Theme, in addition to any other role it may have.⁵ A final example of dual roles in simple sentences occurs in object complement constructions:

<u>Howard</u> jumped <u>the horse</u> over <u>the fence</u>. Howard = Agent

the horse = Theme and Agent

the fence = Location

 \underline{We} made $\underline{Alexandra}$ captain. We = Agent

Alexandra = Theme and Experiencer

captain = Role

In the first sentence, the horse is acted upon by Howard (hence Theme), but itself acts by jumping (hence Agent); this interpretation depends upon a view of horses as beings capable of intentional action. Note that in *Howard drove the car out of the driveway*, "the car" is only Theme, not Agent. In the second sentence, Alexandra is the entity acted upon by us (hence Theme) but is also the being affected inwardly by serving as captain (hence Experiencer).

Dual roles also come about in embedded structures, where a noun phrase has one thematic role by virtue of being the direct object of the higher verb, and another role by virtue of being the subject of the lower verb:

<u>Susan forced Katy</u> to write <u>the letter</u>. Susan = Agent

Katy = Theme and Agent the letter = Factitive

(Actually, it is PRO in the embedded clause that has the role of Agent, but we ignore this fine point here.) In contrast, the same argument, when it follows an *expect*-type verb, as

^{5.} Patient supersedes Neutral. An argument with a Neutral role, when moved to object position, assumes the Patient role and loses its Neutral role.

in Susan expects Katy to write the letter has the sole role of Agent since it is the subject of write, but not the object of expect. In the following sentences, Stu is the Goal of her teaching, but in the first sentence he also has - by virtue of his position as direct object of the upper clause - the role of Theme:

She taught Stu to cook. Stu = Theme and Goal She taught cooking to Stu. cooking = Theme, Stu = Goal

Again, the Theme role carries the implication of completeness, so that to say She taught Stu to cook, but he can't cook a thing is illogical, while to say She taught cooking to Stu, but he can't cook a thing seems acceptable.

> HINT: It is important to distinguish dual thematic roles from ambiguous roles, as in the following:

Crane made a speech for Crawford. Vanessa drowned in the river. Bill floated in the lake. Alex tasted the wine.

In the first sentence, Crawford is ambiguous between Goal and Benefactive, depending on whether Crane made a speech in support of Crawford or whether he made a speech in his stead. In the second sentence, Vanessa is Agent (and Patient) if she intentionally drowned herself, but only Patient if she accidentally drowned; likewise, Bill is Agent (and Theme) if he made himself float in the lake, but only Theme if through no actions of himself he floated (if it were, for example, his dead body that was being talked about). Finally, Alex may be Agent (and Experiencer) if he deliberately sampled the wine, but Experiencer only if he just happened to detect wine in a dish he was eating.

Thematic role grids

If we consider again the sentences given above:

The chef roasted the meat (over the fire). The fire roasted the meat. The meat roasted (over the fire).

we can see that the verb roast (or more specifically the predicate roast over) seems to occur with an Agent role (the chef), an Instrument role (the fire), and a Patient role (the meat). It can be said that the predicate roast "assigns" thematic roles to its arguments. If we consider predicates more generally, we find that any particular predicate occurs uniquely with its own set of arguments serving particular thematic roles, just as it occurred with its own set of NP/AP/PP complements filling syntactic functions such as direct object, indirect object,

etc. Some of these roles will b complement structures, infor in the lexicon.

The thematic role assign matic role grid", which is "th each predicate" (Frawley, 19 frame - is much like the syn Consider the verb open,

> The key (In) opened The intruder (Ag) of The wind (Fo) opene The door (Th) opene *The intruder (Ag) of

It assigns only one obligator ally Instrument. Note that A resent the thematic grid as for and mutually exclusive choi

open Theme + (A

Note that any optional adv not considered in the subca midnight, at midnight is a] thematic grid.

Sample thematic grids The verbs melt and co and an optional Agent, For to be elliptical and also in verbs kill, die, and murder murder assign Agent and the Agent; die assigns only such as Location, which co in the train station (Locati

^{6.} The thematic grids show Instrument may occur eithe

Harry melted the \text{\ell} *The flame melted t Lily cooked the ric *The heat cooked th

e of Agent since it is the subject of ences, *Stu* is the Goal of her teachnis position as direct object of the

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between Goal and Benefactive, support of Crawford or whether he nce, Vanessa is Agent (and Patient) atient if she accidentally drowned; himself float in the lake, but only d (if it were, for example, his dead may be Agent (and Experiencer) if r only if he just happened to detect

redicate roast over) seems to occur ?), and a Patient role (the meat). It es to its arguments. If we consider redicate occurs uniquely with its ust as it occurred with its own set ch as direct object, indirect object, etc. Some of these roles will be obligatory and some will be optional. As was the case with complement structures, information concerning the thematic roles of a predicate is given in the lexicon.

The thematic role assignment of a predicate can be specified in what is called a "thematic role grid", which is "the abstract specification of the thematic role possibilities for each predicate" (Frawley, 1992, p. 241). A thematic grid – what used to be called a case frame – is much like the syntactic subcategorization frame of a verb.

Consider the verb open, for example:

The key (In) opened the door (Th).

The intruder (Ag) opened the door (Th) with the key (In).

The wind (Fo) opened the door (Th).

The door (Th) opened.

*The intruder (Ag) opened. *The wind (Fo) opened. *The key (In) opened.

It assigns only one obligatory role, Theme, and optionally either Agent or Force and optionally Instrument. Note that Agent or Force or Instrument cannot appear alone. We thus represent the thematic grid as follows. It indicates optional case roles by the use of parentheses and mutually exclusive choices by *or*:

open Theme + (Agent or Force) + (Instrument)

Note that any optional adverbial elements would not be considered here, just as they are not considered in the subcategorization of verbs. Thus, in *The intruder opened the door at midnight, at midnight* is a Locative Role, but as an adjunct adverbial, it is ignored in the thematic grid.

Sample thematic grids are given in Table 10.3.

The verbs *melt* and *cook* are similar in both assigning the obligatory role of Patient and an optional Agent, Force, or Instrument. The verb *cook* differs in permitting Patient to be elliptical and also in allowing Factitive to replace Patient⁶. The semantically-related verbs *kill*, *die*, and *murder* differ in their thematic role assignments. While both *kill* and *murder* assign Agent and Patient roles, *kill* allows a nonintentional Force role to replace the Agent; *die* assigns only the Patient role. We are ignoring various circumstantial roles such as Location, which could optionally accompany these predicates, as in *Smithers died in the train station* (Location) or *The gangster murdered Smithers last night* (Location).

Harry melted the butter with a microwave.

Lily cooked the rice with a rice-cooker.

^{6.} The thematic grids shown in Table 10.3 for *melt* and *cook* are somewhat simplified. In fact, Instrument may occur either on its own (as shown) or with Agent (but not with Force):

^{*}The flame melted the butter with a microwave.

^{*}The heat cooked the rice with a rice-cooker.

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Table 10.3. Thematic Grids for English Verbs

| melt | Patient + (Agent or Force or Instrument) | 181 |
|---------------|---|-----|
| | Harry (Ag) melted the butter (Pa). | |
| | The flame (Fo) melted the butter (Pa). | |
| | The microwave (In) melted the butter (Pa). | |
| | The butter (Pa) melted. | |
| | *Harry (Ag) melted. *The heat (Fo) melted. | |
| | *The microwave (In) melted. | |
| <u>cook</u> | Patient or Factitive + (Agent or Force or Instrument) | |
| | Lily (Ag) is cooking rice (Pa). | |
| | Lily (Ag) is cooking. (Patient is elliptical) | |
| | The rice (Pa) is cooking. | |
| | The rice-cooker (In) cooked the rice (Pa). | |
| | The heat (Fo) cooked the rice (Pa). | |
| | Dinner (Pa) is cooking. | |
| <u>kill</u> | Agent (Instrument) or Force + Patient | |
| | The {blow, gunshot, accident} (Fo) killed Smithers (Pa). | |
| | The man (Ag) killed Smithers (Pa) with a knife (I). | |
| | *The knife (In) killed Smithers (Pa). | |
| | *Smithers (Pa) killed. *The {man, blow) (Ag, Fo) killed. | |
| <u>murder</u> | Agent + Patient + (Instrument) | |
| | The gangster (Ag) murdered Smithers (Pa) with a knife (In). | |
| | The gangster (Ag) murdered Smithers (Pa). | |
| | *The gangster (Ag) murdered. | |
| | *Smithers (Pa) murdered. | |
| <u>die</u> | Patient | |
| | Smithers (Pa) died. | |
| | *The man (Ag) died Smithers. | |
| | *The accident (Fo) died Smithers. | |

Perception verbs fall into sets, depending on whether the subject is Experiencer or Agent, as in:

| | hear | Experience + Neutral | I (Ex) heard the noise (Neu). |
|-----|--------------|-----------------------|--|
| vs. | .listen (to) | Agent + Goal | <i>I</i> (Ag) listened intently to the lecture (Go). |
| | see | Experiencer + Neutral | |
| vs. | look (at) | Agent + Goal | I (Ag) looked at the old book (Go). |

Another use of the verb *look* occurs in *The dog looked happy (to me)*, or *The room looked clean (to me)*, where Neutral or Location is an obligatory role and Experiencer is optional. In the case of visual and auditory perception, there are separate lexical verbs, but in the case of tactile perception (as well as olfactory and gustatory perception), there is only one verb:

Thus, our rules would need to be rewritten as follows:

melt Patient + (Agent (Instrument) or Force or Instrument)

feel₁ Experiencer

 $feel_2$ Agent + The

for feel, one would also nee felt damp (to me); in this c Thematic grids can also dis

know Expe

Thematic grids provide arguments that particular into eleven major classes. Instrument role. Within the Patient is affected: (a) TC verbs (saw, slice), (d) RUB verbs (twist, burn), (g) BU

Learn can also have an Ex

Another use of them ple, consider the sentence

She (Ag) sprayed She (Ag) sprayed

Passive can move only Pa

Paint was sprayed
The wall was spra

But we cannot move Lo

?The wall was spi *Paint was spray.

(In syntactic terms, we ex-

Self-Testing Exercise: Do E

3. Predications

Now that we have exam at the way that the verba may be called predicatio