Appendix F: Information Extraction Task: Scenario on Management Succession (v1.1)

Information Extraction Task:

Scenario on Management Succession

(Version 1.1, 18 Sep 95)

1	Narrative	2
2	Template BNF	
3	Fill Rules	
3.1	TEMPLATE Object	2
3.1.1	DOC_NR Slot	
3.1.2	CONTENT Slot	
3.2	SUCCESSION_EVENT Object.	3
3.2.1	SUCCESSION_ORG Slot 4	
3.2.2	POST Slot	
3.2.3	IN_AND_OUT Slot	
3.2.4	VACANCY_REASON Slot 4	
3.3	IN_AND_OUT Object	5
3.3.1	IO_PERSON Slot	
3.3.2	NEW_STATUS Slot	
3.3.3	ON_THE_JOB Slot	
3.3.4	OTHER_ORG Slot	
3.3.5	REL_OTHER_ORG Slot7	
3.4	ORGANIZATION Object	7
3.4.1	ORG_NAME Slot	
3.4.2	ORG_ALIAS Slot	
3.4.3	ORG_DESCRIPTOR Slot7	
3.4.4	ORG_TYPE Slot	
3.4.5	ORG_LOCALE Slot	
3.4.6	ORG_COUNTRY Slot	
3.5	PERSON Object	7
3.5.1	PER_NAME Slot7	
3.5.2	PER_ALIAS Slot	
3.5.3	PER_TITLE Slot	
APPE	NDIX A. ON_THE_JOB Slot Fill Criteria	9

1 Narrative

This scenario concerns events that would be of interest to an analyst who tracks changes in company management. The event object captures the management post, the company, the current manager, and the reason why the post is or will be vacant. The relational and low-level objects capture information on who's "in" and who's "out," where the new manager came from, and where the old manager is going. A relevant article refers to assuming or vacating a post in a company and must minimally identify the post and either the person assuming the post or the person vacating the post.

2 Template BNF

```
<TEMPLATE> :=
                        "NUMBER" ^
   DOC_NR:
   CONTENT:
                        <SUCCESSION_EVENT> *
   COMMENT:
                         "COMMENT" -
<SUCCESSION_EVENT>:=
   SUCCESSION_ORG:
                        <ORGANIZATION> ^
   POST:
                        "POSITION TITLE" | "no title" ^ /* string fill from
                               text, or string "no title" (see fill rules) */
   IN_AND_OUT:
                        <IN_AND_OUT> +
   VACANCY_REASON:
                        {DEPART_WORKFORCE, REASSIGNMENT, NEW_POST_CREATED,
                              OTH_UNK} ^
   COMMENT:
                         "COMMENT" -
<IN_AND_OUT>:=
   IO_PERSON:
                        <PERSON> ^
   NEW_STATUS:
                        {IN, IN_ACTING, OUT, OUT_ACTING} ^
   ON_THE_JOB:
                        {YES, NO, UNCLEAR} ^
   OTHER_ORG:
                        <ORGANIZATION> -
   REL_OTHER_ORG:
                        {SAME_ORG, RELATED_ORG, OUTSIDE_ORG} -
   COMMENT:
                        "COMMENT" -
<ORGANIZATION> :=
      ORG_NAME:
                        "NAME" -
                        "ALIAS" *
      ORG_ALIAS:
      ORG_DESCRIPTOR:
                        "DESCRIPTOR" -
      ORG_TYPE:
                        {GOVERNMENT, COMPANY, OTHER} ^
                        LOCALE-STRING {{LOC_TYPE}} *
      ORG_LOCALE:
      ORG_COUNTRY:
                        NORMALIZED-COUNTRY-or-REGION
                              COUNTRY-or-REGION STRING *
      COMMENT:
                        "COMMENT"-
<PERSON> :=
      PER_NAME:
                        "NAME"^
      PER_ALIAS:
                        "ALIAS"*
      PER_TITLE:
                        "TITLE"*
      COMMENT:
                        "COMMENT"-
LOC_TYPE :: {CITY, PROVINCE, COUNTRY, REGION, UNK}
```

3 Fill Rules

Note that each object defined by the template BNF contains a COMMENT slot. This slot is reserved for use in the answer-key templates; it is not to be generated by the extraction systems. See *Information Extraction Task Definition* document for further information.

3.1 TEMPLATE Object

DEFINITION: Top-level object.

See Information Extraction Task Definition for further information.

3.1.1 DOC_NR Slot

DEFINITION: Document identifier. See Information Extraction Task Definition for further information.

3.1.2 CONTENT Slot

DEFINITION: Pointer to object that captures info on the management succession event. See *Information Extraction Task Definition* for general information.

MINIMUM INSTANTIATION CONDITIONS: Article must identify or refer to a company management post, must identify the company, and must identify either (1) the person who has assumed or will be assuming the post or (2) the person who has vacated or will be vacating the post. To be relevant, it must be the case that the post definitely was, is now, or will be vacant; if the vacancy is contingent on other events or the decision to replace an officer is otherwise not yet definite, the text is nonrelevant. In addition, in the case of condition (1), it is not sufficient for a person to have been identified as a candidate for a post; he or she must rather be identified as the definite choice for that post, either on an acting or permanent basis. In the case of condition (2), any posts other than the person's most recently held one are not relevant; thus, accounts of a person's prior work experience are not relevant. Similarly, any successions to a post other than the most recently reported succession to that post are not relevant; thus, accounts of people who held a particular post prior to the news of the most recent succession to that post are not relevant.

SPECIAL USAGE NOTES:

- Relevant types of organizations are limited to those that are categorized as COMPANY in the ORGANIZATION object. Thus, management posts in government entities, international agencies, and miscellaneous organizations such as labor unions are nonrelevant, whereas management posts in for-profit and not-for-profit entities such as corporations, universities, and charitable organizations are relevant.
- 2. Relevant types of management posts are limited to company officers and other top management. Thus, positions such as university professor, law firm partner, and publishing company editor are nonrelevant, whereas positions such as university president and corporate treasurer are relevant.
- 3. Boards of directors are treated specially. Posts related to the chairmanship (chairman, vice chairman, deputy chairman, etc.) are relevant posts, as are directorships with special titles, such as 'managing director' or 'director of the European subsidiary' (the latter may actually represent a separate usage of the word 'director'). The general title of 'director' is taken to mean a general member of the board of directors and is not relevant to the scenario.

3.2 SUCCESSION_EVENT Object.

DEFINITION: The management succession event.

MINIMUM INSTANTIATION CONDITIONS: See section 3.1.2.

SPECIAL USAGE NOTES:

- 1. Since the simulated database design represented by the extraction template is centered on corporate posts rather than on persons, instantiate separate SUCCESSION_EVENT objects for each post, even in the case where a particular person is acquiring or vacating more than one post at a particular organization.
- 2. There will naturally be two SUCCESSION_EVENT objects involving a particular person if the person is giving up one post in order to take another. However, the text often does not clearly indicate that the person must give up the old post. In the unclear cases, the following guidelines are to be used:

a. If the two posts are at the same company and are 'mutually exclusive', the person is giving up the old post to acquire the new one. Examples of mutually exclusive posts: sole CEO versus co-CEO, chairman versus chairman emeritus, president versus vice-president.

b. If the two posts are at the same company or at related companies (see section 3.3.5, below) and the posts are not mutually exclusive, the person is not giving up the old post to acquire the new one. (It is quite common for one person to hold several posts at one company, and it is not uncommon for a person to hold posts in more than one company simultaneously if the companies are related.)

c. If the two posts are at unrelated companies, the person is giving up the old post to acquire the new one.

- 3. All persons in a succession involving a shared post are represented in a single SUCCESSION_EVENT object. The fact that a post is shared may be indicated by the title (e.g., 'co-chairman'), but may also be indicated indirectly. As a general guideline in these cases of indirect description, two persons are considered to share a post at a particular company if they are associated with exactly the same title and with no differences in responsibilities.
- 4. A switch from a shared post, to a solely held post, or vice versa, is to be represented in separate SUCCESSION_EVENT objects, i.e., a shared post is distinct from a solely held post.

3.2.1 SUCCESSION_ORG Slot

DEFINITION: Pointer to object that captures info on the organization with the (past, present, future) management vacancy.

MINIMUM INSTANTIATION CONDITIONS: The name or description of the organization must be given.

3.2.2 POST Slot

DEFINITION: The management post at SUCCESSION_ORG where there was, is, or will be a vacancy.

MINIMUM INSTANTIATION CONDITIONS: Text must directly identify the management post, or indirectly but clearly refer to a top management post.

SPECIAL USAGE NOTES:

- 1. If the text provides a title or description of the post, the fill is a string containing that phrase, e.g., "CEO", "chief executive officer", "chief executive", "the top office", "the top officer", "head", "president", "presidency", "vice president, international marketing", "vice president in charge of international marketing". Alternative fills will be provided in the answer key if the phrases found in the text are essentially equivalent, e.g., "CEO", "chief executive officer" and "chief executive". However, if the text provides a specific title and a more general job description, only the specific title will be included in the answer key; thus, if both "chief executive officer" and "the top office" appear in a text, the answer key will contain only "chief executive officer". If the text provides only an indirect indication of a relevant post, e.g., via a verb phrase such as "will run the company" or an idiom such as "took the helm", the fill is the string "no title".
- 2. The word 'post' and words that are essentially synonymous with it ('position', 'title', 'job', etc.) should be excluded from the fill. Thus, if the text string is "the CEO post", "the position of CEO", or "the title CEO", the POST slot fill should be just "CEO".
- 3. If a title is that of an acting officer, e.g., "acting president", the title is treated as being the same as that of a permanent position. (The identification of acting officers is captured in the NEW_STATUS slot, rather than being represented at a higher level via separate SUCCESSION_EVENT objects.) Words such as 'acting', 'interim' and 'temporary' should be excluded from the POST slot fill.

3.2.3 IN_AND_OUT Slot

DEFINITION: A pointer to the object that captures relational information on the person assuming a post and/ or the person vacating that post. This slot will normally have one or two fills, but it may have three or more, in the case of a shared post such as "co-chairman" or "vice president".

MINIMUM INSTANTIATION CONDITIONS: The article must identify the person by name.

SPECIAL USAGE NOTES:

1. Instantiate separate IN_AND_OUT objects for each move, even when this results in the creation of identical IN_AND_OUT objects, as in the case where a particular person is acquiring or vacating more than one post at a particular organization.

3.2.4 VACANCY_REASON Slot

DEFINITION: A general categorization of the reason why the post was, is, or will be vacant. When the outgoing person was/is occupying the post on an interim (acting) basis, the VACANCY_REASON refers not to the acting titleholder's reason for departure but to the previous permanent titleholder's reason for departure.

MINIMUM INSTANTIATION CONDITIONS: This slot must always be filled; the default fill is OTH_UNK.

SPECIAL USAGE NOTES:

1. The categories that are to be used for this slot are defined as follows:

DEPART_WORKFORCE -- Vacancy created because of someone's retirement, death, or illness, or because of someone resigning with intention not to work again. In the case of a retirement, the DEPART_WORKFORCE fill should be used even if someone retires from one organization to go work at another.

REASSIGNMENT -- Vacancy created because of someone's leaving a post voluntarily or involuntarily. The article must make some reference to the act of leaving, but does not have to indicate the reason for departure. Thus, it includes all positive evidence for the act of vacating a post (except for cases that fit the definition of DEPART_WORKFORCE): firing, resignation, quitting/leaving for any reason, moving to a new position at either the same company (e.g., via promotion or management shuffle) or at a different company (jobhopping).

NEW_POST_CREATED -- Vacancy exists because of creation of a new post at an existing company or at a new company. When a new company is formed (including a company formed by a merger), all posts are new.

OTH_UNK -- Vacancy exists for other reasons or unknown reasons. The kinds of cases that fit this category with some frequency include (1) a post is being eliminated, and no positive evidence for the person's act of relinquishing the post is given; (2) a person is losing one but not all of his or her titles and not gaining any new ones, and no positive evidence for the person's act of relinquishing the lost post is given; (3) someone is being 'succeeded' in a post or someone is a 'former' holder of a post, but no positive evidence for the person's act of departing is given; (4) a company is being acquired by another company, but no positive evidence for people's act of departing the former company is given.

The DEPART_WORKFORCE and NEW_POST_CREATED represent fairly specific reasons for a vacancy. REASSIGNMENT and OTH_UNK are more general categories. REASSIGNMENT would provide an analyst only with the information that the article contained *some* specific reference to the person's departure and/or move to a new job; that reference may be enough to inform the analyst what the circumstances for the departure were.

3.3 IN_AND_OUT Object

DEFINITION: This object relates information on the person assuming a post and/or the person vacating that post with information on his/her status vis-a-vis that post and his/her past or future corporate affiliation.

MINIMUM INSTANTIATION CONDITIONS: See section 3.2.3.

3.3.1 IO_PERSON Slot

DEFINITION: Pointer to object that captures info on the person assuming a post (or set of posts) or the person vacating that post (or same set of posts).

MINIMUM INSTANTIATION CONDITIONS: See section 3.2.3.

SPECIAL USAGE NOTES:

1. There is at least one situation where a single person may appear both in the role of the person assuming a post and in the role of the person vacating the post: the person's job status may be changing from 'acting to 'permanent,' which is recorded via distinct fills in the NEW_STATUS slot for the two IN_AND_OUT objects.

3.3.2 NEW_STATUS Slot

DEFINITION: Identification of the new status of IO_PERSON with respect to POST, i.e., an indication of whether the person being referred to is (or will be) the new holder of a post or whether he/she is (or will be) the old holder of the post.

MINIMUM INSTANTIATION CONDITIONS: This slot must always be filled.

SPECIAL USAGE NOTES:

1. The categories that are to be used for this slot are defined as follows: IN -- The person's appointment is permanent. IN_ACTING -- The person's appointment is as an acting officer. OUT -- The person is vacating the post.

OUT_ACTING -- The person is no longer going to be an acting officer.

2. An 'acting' officer is one who is identified as "acting", "temporary", "interim", etc. or who is described as keeping the post only until a successor is found.

3.3.3 ON_THE_JOB Slot

DEFINITION: Identification of the status of IO_PERSON with respect to POST as of the date of the article, i.e., information on who the 'current' holder of the post was at the time the news appeared.

MINIMUM INSTANTIATION CONDITIONS: This slot must always be filled. The default is UNCLEAR.

SPECIAL USAGE NOTES:

1. The categories that are to be used for this slot are defined basically as follows, and their usage is described more fully in Appendix A:

YES -- The person held the post as of the date of the article. If the person is newly appointed to the job, YES means that the person is already actually onboard and working in that capacity; if the person is vacating the post, YES means that the person has not yet been officially relieved of the duties of that post.

NO -- The person did not hold the post as of the date of the article. If the person is newly appointed to the job, NO means that the person is not yet actually onboard and working in that capacity. If the person is vacating the post, NO means that the person has already been officially relieved of the duties of that post.

UNCLEAR -- The information given in the article is not sufficient to determine whether the person held the post as of the date of the article. For example, the fill should be UNCLEAR if the article says that someone was "named" to a post but does not say that the person has "succeeded" the predecessor (which would occasion the fill to be YES) or that the person "succeeds" or "will succeed" the predecessor (which would occasion the fill to be NO).

3.3.4 OTHER_ORG Slot

DEFINITION: Pointer to ORGANIZATION object that captures information on the IO_PERSON's past or future employer organization. It indicates the past affiliation if the value of NEW_STATUS is IN or IN_ACTING, and it indicates the future affiliation if the value of ON_THE_JOB is NO. The organization may be of any type; it does not have to be type COMPANY.

MINIMUM INSTANTIATION CONDITIONS: The name or description of the organization must be given.

SPECIAL USAGE NOTES:

- 1. In the normal case, OTHER_ORG and SUCCESSION_ORG will point to the same ORGANIZATION object only when the succession event represents a promotion or shuffle within an organization. However, they may point to the same ORGANIZATION object under other circumstances as well, such as when a person holds more than one post and is going to give up some portion of them, but not all of them.
- 2. Unless the article makes it clear that someone is not moving directly from one job/company to another, assume that the transition is direct. For example, if an article says that an incoming person 'was' an officer at a different organization, assume that the person came directly from that organization, and fill OTHER_ORG with a pointer to that organization.
- 3. Positions on a company's board of directors other than those that are relevant to the scenario (see Special Usage Notes in section 3.1.2) are not considered jobs (employment) at that company. For this reason, OTHER_ORG will never point to an ORGANIZATION object that represents a board of directors. Furthermore, it will not point to the same ORGANIZATION object as the SUCCESSION_ORG slot if the person's only position at that organization is as a nonrelevant member of that organization's board. As a consequence, in cases where a new corporate officer was previously a director and in cases where an outgoing corporate officer is going to be retaining or acquiring a seat on the board as a director, the OTHER_ORG slot will point to the person's previous place of employment (when the person is an incoming officer) or his next place of employment (when the person is an outgoing officer), if the text provides that information. Otherwise, leave the slot blank. (If there is obviously a major employment gap between the person's stints at the two organizations, the OTHER_ORG fill may be marked optional in the answer key.)

4. A consultant to a company is not an employee of the company. Therefore, the guidelines concerning consultants are consistent with those outlined above concerning nonrelevant board members.

3.3.5 **REL_OTHER_ORG** Slot

DEFINITION: Identification of whether the person's new job and old job are with the same organization, a related organization, or an unrelated organization. In terms of the template definition, this slot indicates the corporate relationship between OTHER_ORG and SUCCESSION_ORG.

MINIMUM INSTANTIATION CONDITIONS: This slot must be filled if OTHER_ORG is filled.

SPECIAL USAGE NOTES:

1. The categories that are to be used for this slot are defined as follows:

SAME_ORG -- The person's old and new positions are with the same organization.

RELATED_ORG -- The person's old and new positions are in organizations that are identified in the text as having some corporate relationship with each other, e.g., different units (child companies) of the same parent company, different companies that have formed a merger, a company that is controlled via majority stock ownership by a different company.

OUTSIDE_ORG -- The person's old and new positions are in organizations that are not identified in the text as having some corporate relationship with each other.

3.4 ORGANIZATION Object

DEFINITION: An organization that is involved in the succession event.

MINIMUM INSTANTIATION CONDITIONS: See section 3.2.1.

3.4.1 ORG_NAME Slot

DEFINITION: The name of the organization.

See Information Extraction Task Definition document for further information.

3.4.2 ORG_ALIAS Slot

DEFINITION: An alias for an organization.

See Information Extraction Task Definition document for further information.

3.4.3 ORG_DESCRIPTOR Slot

DEFINITION: Phrase describing an organization.

See Information Extraction Task Definition document for further information.

3.4.4 ORG_TYPE Slot

DEFINITION: The type of organization.

See Information Extraction Task Definition document for further information.

3.4.5 ORG_LOCALE Slot

DEFINITION: Location of an organization.

See Information Extraction Task Definition document for further information.

3.4.6 ORG_COUNTRY Slot

DEFINITION: Country where organization is located.

See Information Extraction Task Definition document for further information.

3.5 PERSON Object

DEFINITION: Person whose management post has changed or is changing.

See Information Extraction Task Definition document for further information.

3.5.1 PER_NAME Slot

DEFINITION: The name of the person.

See Information Extraction Task Definition document for further information.

3.5.2 PER_ALIAS Slot

DEFINITION: Alias for a person.

See Information Extraction Task Definition document for further information.

3.5.3 PER_TITLE Slot

DEFINITION: Title of a person.

See Information Extraction Task Definition document for further information.

APPENDIX A. ON_THE_JOB Slot Fill Criteria

These are the main heuristics used by the annotators in preparing the answer key fills for the ON_THE_JOB slot in the IN_AND_OUT object.

A.1 99%-100% certainty: Fill is either YES or NO (no alternatives)

A.1.1 If NEW_STATUS = IN:

```
A.1.1.1 YES:
```

- if person is identified as currently holding post

EXAMPLES:

```
"MR. X IS CEO"
"Mr. Y (predecessor of Mr. X)'s subordinates would report temporarily
to MR. X (who therefore must be already on the job)"
```

- if person is identified as having come on the job as of a date in the past (up to and including the date of the article)

EXAMPLES:

"MR. X TOOK OVER APRIL 1" "MR. X WILL BE CEO, EFFECTIVE IMMEDIATELY"

- if person is identifed as having been 'hired' (etc.) at least two months prior to the date of the article; in other words, it would be unreasonable to think the person was still in transition

A.1.1.2 NO:

- if all references to the situation are in the future tense and are not modified by a phrase referring to the date of the article

```
EXAMPLES:
          "MR. X WILL REPORT to Mr. Y"
          "MR. X WILL BE CEO"
   - if person's future arrival date is given
       EXAMPLE:
          "MR. X IS EXPECTED TO BEGIN HIS NEW POSITION BY JUNE 1"
  - if person is identified as not having left his old post yet, and the new post and old post are mutually exclusive<sup>1</sup>
       EXAMPLE:
          "Mr. X will retire as chairman June 1... MR. X HAS BEEN NAMED
            CHAIRMAN EMERITUS"
     If NEW_STATUS = OUT:
A.1.2
A.1.2.1 YES
   - if person's future date of departure is given
       EXAMPLES:
          "the move is effective June 1"
          "MR. X'S SCHEDULED RETIREMENT THIS MONTH"
          "MR. X STEPS DOWN ON JULY 1"
   - if verb form can only be interpreted as future
       EXAMPLE:
          "MR. X IS RETIRING"
```

A.1.2.2 NO:

 if person is identified as having left the post, even if article doesn't indicate the date when the person left

^{1.} See section 3.2 Special Usage Notes.

EXAMPLES:

'left,' 'bolted,' 'stepped down,' 'was pushed aside'

 - if person is identified as having previously held the post via some special word or phrase (not just or only by use of past tense -- see 2.2.2)

EXAMPLES:

'former CEO', 'retired CEO', 'most recently CEO'

 if person is currently holding a different post, and the new post and old post are mutually exclusive EXAMPLE:

"MR. X TOOK THE HELM OF IBM IN MARCH... Mr. X was president of AT&T"

- if nothing is said definitely about the person's status, but the article definitely says his successor is on the job (they can't both be on the same job simultaneously)
- if person is identified as having been 'fired' (etc.) a significant time earlier than the date of the article; in other words, it would be unreasonable to think that the person was still in transition EXAMPLE:

"THE COMPANY FIRED MR. X LAST SUMMER"

A.2 75% certainty: Alternative fills (YES/UNCLEAR or NO/UNCLEAR)

A.2.1 If NEW_STATUS = IN:

- A.2.1.1 YES/UNCLEAR:
 - if past tense used, and there are supporting indicators EXAMPLE:

'became' plus evidence that the company has turned around under the command of the new executive

A.2.1.2 NO/UNCLEAR:

- if potentially (but not necessarily) contradictory evidence is given (e.g., when different tenses are used in reference to the person acquiring the post) EXAMPLE:

'named' plus 'will be involved'

A.2.2 If NEW_STATUS = OUT:

A.2.2.1 YES/UNCLEAR:

 if there is genuine ambiguity in interpretation of a time modifier, and maybe the article also makes it clear that the successor doesn't yet hold the post

EXAMPLES:

"In January, with Mr. Y a lame duck, ACTING CFO MR. X ran the search" "Mr. Y will assume post on March 1" plus "MR X IS MOVING TO THE EAST COAST"

A.2.2.2 NO/UNCLEAR:

 - if all references to the person's position are in the past tense, but there is no concrete evidence, e.g., of departure date from old post or arrival date at new post (if he has to give up old post before taking on new one)

EXAMPLES:

'was', 'was previously'

A.3 50% certainty: Fill is UNCLEAR (no alternatives)

A.3.1 If NEW_STATUS = IN:

A.3.1.1 UNCLEAR:

- if past or present tense is used to relate the event, and if there are no further indicators EXAMPLES:

A.3.2 If NEW_STATUS = OUT:

- A.3.2.1 UNCLEAR:
 - if person retains another title, and if there are no indicators re the title in question, and if there is no indication that the person is on the job yet in some mutually exclusive post
 - if a successor has been named to the post, but there is no indication about the person represented by the current object
 - if the person has 'resigned' or 'retired' or been 'fired,' 'ousted' (etc.), but no indication of the effective date is given

•

^{&#}x27;named', 'approved the election of', 'succeeds' etc.