Objective

The objective of this project is to gain some experience with intelligent video editing systems, work with interactive video presentation interfaces, rule-based systems, narrative structures and representation of video content. You will be making extensions to Splicer, a system designed by Warren Sack and Abbe Don.

Splicer

The system consists of two parts: An interface for presentation of a knowledge base of video clips, called the VideoWall, and Montage Rules for automatically putting together video sequences.
There are about 50 clips, digitized with Quicktime, that deal with the Iran-Contra hearings. The clips present a variety of points of view, both the positions of the US government, and of those who criticize it for the incident. Each clip is annotated with information describing who is speaking, the topic, and other information. Rules can be written in a Prolog-like language to compose sequences of clips. You will write new rules and annotations for the existing material, and make extensions to the interface.

The VideoWall is a spreadsheet-like grid that contains rows and columns that present a collection of video clips, characterized according to different relations. You may pick relations for the rows and columns from the VideoWall menu. The Create operation causes a new VideoWall to be computed with the currently selected row and column relations. The new VideoWall automatically sizes the cells according to the number of clips retrieved for that relation by the VideoWall rules.

Each clip may be played by clicking on it. Double-click starts the clip, single-click stops.

It is worth noting that VideoWall is unlike a spreadsheet or database in that the relations need not be indexed in advance explicitly in the data. The clips that are retrieved to fill each cell are computed by Prolog-like rules at the time the VideoWall is requested, and can be inferred from existing annotations. New relations can be added at any time by writing new rules.

The Montage Rule menu contains a list of rules for assembling clips into a sequence. You may pick an initial clip and a rule and the system can apply that rule to create a sequence starting with that clip.

The results of the rule application are displayed in the Montage Rule Bar, as a series of icons, each representing a single clip. A Quicktime viewer centered at the top allows the sequence to be played in its entirety.

The system stores examples of applications of the montage rules. Initially, there are no stored examples, but as you create examples, you can browse through the set of existing examples.
**Understand how Splicer works**

First, play with the interface to get a feel for how it works. Create some different VideoWalls by playing with the VideoWall menu. Choose some different relations for the rows and columns. Note how the layout changes according to what is retrieved. Play the clips in the cells. Can you understand the categorizations of the clips?

[You may have to know something about the Iran-Contra story to understand the clips out of context. If you are unfamiliar with the background of the Iran-Contra story, we can supply you with a short reading.]

Play with the Montage Rule menu. For each rule, try it with a variety of initial clips. Can you understand how the sequences are being put together?

**Annotating clips**

Annotations for the clips are stored in the file **Annotations.Lisp**. The `defclip` macro creates an annotation for each clip. Look at some clips, then find their annotations to see what information the system stores about them.

Though the syntax is similar to CLOS, each of the "slots" expands into a Prolog assertion. The slot name is a Prolog predicate.

If you are not familiar with Prolog, or the idea of Logic Programming, you may want to read the chapter on Prolog in *Introduction to Artificial Intelligence Programming* by Peter Norvig. We can also suggest other references for Prolog.

Try some examples of retrieving information from the annotations.

```
(?- (speaker ?Clip-Name (Oliver North))
```

retrieves the names of all clips in which North is speaking.

**Taxonomy**

The rules that describe the hierarchy of concepts used in the annotations resides in the file **Taxonomy.Lisp**. This describes, for example, which people are members of groups that have a defined role in the affair, or share a common outlook. Relate the taxonomic rules to the information in the annotations of the clips.

Practice some retrievals that exercise the taxonomic rules.

```
(?- (and
    (speaker ?Clip-Name ?Speaker)
    (member-of ?Speaker
      (Former administration insiders))))
```

finds all clips where former administrations insiders are speaking.

**VideoWall Rules**

To see how the VideoWall works, we will trace a VideoWall rule.

Create the VideoWall that has **group-of-speaker** as the row relation, and **topic-of-dialog** as the column relation.

Trace the predicate

```
(trace topic-of-dialog/2)
```
[The /2 refers to the fact that this predicate takes 2 arguments, and must be mentioned when you turn on the trace].

Now do the query

\( \text{(?- (and (topic-of-dialog ?Clip Contra-Issues) (group-of-speaker ?Clip Viewers)))} \)

to see how the VideoWall finds the clips to fill in the cell indexed by Contra-Issues and Viewers.

Try tracing \textbf{group-of-speaker} and issue the same query. Try it with other cells.

Montage Rules

The Montage Rules are stored in the file \texttt{Plot-Segments1.Lisp}. Look at the rule \texttt{point-counter-point}. Understand how it works, and trace an example as we did with VideoWall to watch how it works.

Task: Extending Splicer

Write a new Montage Rule for Splicer. Trace an example as we did above. Make three or four example sequences with your new rule. Do the sequences produced fit together as well as you intended? Is the rule intelligible from watching the sequences?

Write some new annotations for the existing clips. Add a slot to the existing annotations that captures some other aspect of the material. Write some new taxonomy rules, and perhaps a new montage rule, that take advantage of the new annotations and make some sequences with it.

Extend the interface

Critique the Splicer interface itself. Are there other ways in which you could graphically present the video material or annotations? Other ways in which a user might want to interact with it? Design a significant extension to the Splicer interface and implement it.

For example, you could imagine a hierarchical tree representation rather than a grid representation for presenting the collection of clips. You could use the object-oriented tree grapher in the Lisp \texttt{examples} folder to display a tree of video sequences. Is there some way in which you could graphically represent the rules or annotations themselves?

Appendix: Rules

This appendix contains the code for the clip annotations, the topic taxonomy, the montage rules, and the video wall rules. All of this code is written in a modified version of Prolog. The modifications are mostly in the form of macros that allow one to more easily write clauses as structured data (see the clip annotations for some examples) and that define special semantics for specific kinds of rules (e.g., the rules for the video wall). This modified form of Prolog, the Quicktime video library, and the interface code has all been implemented in Common Lisp. The Common Lisp code is not listed below, but is available upon request.

The clip annotations describe who is speaking to whom about what in each of the video clips. The taxonomy of topics links the specific phrases contained in the dialog of the clips to more general and more specific topics. The montage rules describe abstract ways of sequencing the clips together to generate new videos composed of the existing clips. And, the video wall rules describe
specific ways of querying the database of clips so that they can be arranged in a gridded, “spreadsheet-like” format in the interface.

Clip Annotations

(defclip hakim1
  :speaker (narrator)
  :positions ((narrator) (sitcom star) (witch) (Samantha))
  :issues ((albert hakim))
  :viewers ((congress))
  :characters ((albert hakim))
  :dialog
  (albert hakim)
  :filename "hakim1")

(defclip honegger1
  :speaker (Barbara Honegger)
  :positions ((former white house policy analyst) (author))
  :issues ((delay release of hostages)
    (arms for hostages)
    (secret meetings)
    (deal with Khomeni))
  :viewers ((narrator))
  :characters ((George Bush) (Richard Allen) (Ronald Reagan) (Khomeni)
    (Donald Greg))
  :dialog
  (there were two meetings that we know of for certain to date
    that happened one in Washington DC and one in Paris, France before
    the 1980 election in October of 1980 where George Bush then
    vice-presidential candidate and Richard Allen who became Reagan’s
    national security advisor Donald Greg who became Bush’s national
    security advisor and still is passed millions of dollars to the
    Iranians to delay the release of our 52 hostages an additional 76 days
    they met with an emissary of the Khomeni regime who offered a deal
    that they thought Reagan and Bush could not refuse and that was we
    will delay the release of the 52 hostages if you will promise us all of the
    arms that we could possibly want in the war against Iraq once you
    become president of the United States)
  :filename "honegger1")

(defclip narrator1
  :speaker (Elizabeth Montgomery)
  :positions ((narrator) (sitcom star) (witch) (Samantha))
  :issues ((arms for hostages)
    (secret meeting)
    (middle-men)
    (delay release of hostages))
  :viewers ((narrator))
  :characters ((George Bush) (Albuhassam Bonisadir) (Monicar Gorbanifer)
    (Albert Hakim) (Reagan Bush campaign) (Israeli owned company))
  :dialog
  (the man who was the president of Iran during the hostage crisis was
    Albuhassam Bonisadir he was later ousted in a coup and is now living in
    exile in Paris Bonisadir supports the charges that a deal was made with
    the Reagan-Bush campaign to delay the release of the hostages \ In a
    recent interview he confirms that the Paris meeting took place and states
    that George Bush was specifically identified as being at the meeting by
    Iranian intelligence reports \ Also identified were Monicar Gorbanifer
Albert Hakim, who later emerged as key middle-men in the Iran-Contra scandal as evidence of this agreement Bonisadis has made documents available showing written orders for shipment of American parts and weapons to Iran through an Israeli owned company.

(defclip north1
  :speaker (Oliver North)
  :positions ((former national security council aide) (lieutenant colonel))
  :issues ((aid for contras))
  :viewers ((Congress))
  :characters ((William Casey) (Ayatollah Khomeni) (contras))
  :dialog
  (I must confess to you that I thought that using the Ayatollah's money to support the Nicaraguan resistance was the right idea. I was not the only one who was enthusiastic about this idea. Director Casey referred to it as the ultimate irony, the ultimate covert operation)
)

(defclip honegger2
  :speaker (Barbara Honegger)
  :positions ((former white house policy analyst) (author))
  :issues (((reagan bush support for iran)
    (prevent the spread of communism)))
  :viewers ((narrator))
  :characters ((reagan-bush administration) (khomeni regime)
    (ronald reagan))
  :dialog
  (the Reagan-Bush administration, right from the start, right from the beginning, behind the scenes has been an ally of the Khomeni regime because Ronald Reagan's number one fear is a Soviet invasion of Iran. It's that simple)
)

(defclip narrator2
  :speaker (Elizabeth Montgomery)
  :positions ((narrator) (sitcom star) (witch) (Samantha))
  :issues ((chain of command) (covert operators))
  :viewers ((congress))
  :characters ((theodore shackley) (george bush) (thomas clines)
    (rafael "chi chi" quintero) (John Singlaub)
    (Richard Secord) (albert hakim))
  :dialog
  (theodore shackley who was assistant deputy director of the operations for the central intelligence agency as of 1976 under george bush who was cia director at the time thomas clines who worked as a case officer under shackley in miami and in laos rafael "chi chi" quintero an anti-Castro Cuban who worked under Clines and was allegedly recruited by the cia as an assassin; General John Singlaub who worked with Shackley and Clines in Vietnam and was in charge of the cia special operations over the border into Laos; General Richard Secord who supervised the air operations into Laos and was later assigned to the Pentagon where he was put in charge of arms sales to Iran; Albert Hakim who was a salesman for US weapons companies and a middle-man in the Iran-Contra affair)
(defclip sheehan1
  :speaker (Daniel Sheehan)
  :positions ((lawyer) (director of Christic Institute))
  :issues ((contras))
  :viewers ((narrator))
  :characters ((contras))
  :dialog
  (not an indigenous force inside Nicaragua that had any support from any of
   the
   population in Nicaragua it was a total artifice created by these men)
  :filename "sheehan1")

(defclip secord1
  :speaker (Elizabeth Montgomery)
  :positions ((retired general) (businessman))
  :issues ((richard secord))
  :viewers ((congress))
  :characters ((richard secord))
  :dialog
  (general secord)
  :filename "secord1")

(defclip north2
  :speaker (Oliver North)
  :positions ((former national security council aide) (lieutenant colonel))
  :issues ((contras))
  :viewers ((congress))
  :characters ((contras) (sandinistas))
  :dialog
  (these are young men and women who gave up everything they had and they fled a
   totalitarian communist regime and they fled to another country because they could no longer live in the one they had been born in and they took up arms I didn't create the Nicaraguan contra or the Nicaraguan freedom fighter and the cia didn't create it the sandinistas created it)
  :filename "north2")

(defclip profscott1
  :speaker (Peter Dale Scott)
  :positions ((professor))
  :issues ((covert operators) (reagan-bush campaign))
  :viewers ((narrator))
  :characters ((covert operators) (ronald reagan) (george bush))
  :dialog
  (When all these covert operators were fired in the 1970s\, they didn't just start opening restaurants or working in bookstores they were people who were very skilled in covert manipulation of political process and they essentially ganged up to find and then elect a candidate who would put them back in the covert operations business and reagan and bush were only too eager to be that kind of candidate)
  :filename "profscott1")

(defclip reagan1
  :speaker (Ronald Reagan)
  :positions ((president))
issues ((covert operators) (reagan-bush campaign))
viewers ((american public))
characters ((ronald reagan) (hostages))
dialog
(A few months ago I told the American People I did not trade for hostages my
heart and my best intentions still tell me that's true but the facts and
the evidence tell me it is not)
filename "reagan1")

defclip north3
speaker (oliver north)
positions ((former national security council aide) (lieutenant colonel))
issues ((residuals from arms sales) (meeting with Gorbanifar)
(support of the Nicaraguan resistance))
viewers ((congress))
characters ((Gorbanifar) (Oliver North) (contras))
dialog
(Mr Gorbanifar took me into the bathroom and Mr Gorbanifar suggested
several incentives to make that February transaction work and
the attraction \ \ attractive incentive for me was the one he
made that residuals could flow to support the Nicaraguan resistance)
filename "north3")

defclip chamorro1
speaker (edgar chamorro)
positions ((former contra leader) (cia employee))
issues ((contras tactics))
viewers ((narrator))
characters ((contras) (Nicaraguan civilians))
dialog
(The tactics used by the contras were the tactics of terrorizing civilians)
filename "chamorro1")

defclip chamorro2
speaker (edgar chamorro)
positions ((former contra leader) (cia employee))
issues ((deceiving the American people) (lying to Congress)
(war in Nicaragua) (pressure on Nicaragua))
viewers ((narrator))
characters ((contras) (cia) (people from the white house)
(united states) (nicaragua) (american people)
(congress))
dialog
(I became involved with the contras because the cia using people from
the White House they invited me to be one of of the contra
leaders \ I was told that this was just a war for a year
that the united states wanted to put this pressure on Nicaragua
but then after a year or so I found out that this was not the case
We were being used to deceive the American people we were being used
to lie to Congress to tell congress that the purpose was a good purpose
to bring democracy \ but in private we were being told something different
\ so I think this was big lie)
filename "chamorro2")

defclip white1
speaker (robert white)
positions ((former ambassador to el salvador))
issues ((overriding the constitution) (national security state))
viewers ((narrator))
characters ((national security agencies))
dialog
(The exposure of the beginnings of a national security state which believes it has the right to override the constitution of the United states in the name of security)
filename "white1")

(defclip honegger3
  :speaker (Barbara Honegger)
  :positions ((former white house policy analyst))
  :issues ((cutting a deal with Iran) (Iran holding hostages))
  :viewers ((narrator))
  :characters ((Ronald Reagan)(52 hostages) (Iran))
  :dialog
(Ronald Reagan cut a deal with Iran before the 1980 election to send arms to Iran in exchange for Iran's agreeing to delay the releasing of our 52 hostages)
filename "honegger3")

(defclip honegger4
  :speaker (Barbara Honegger)
  :positions ((former white house policy analyst))
  :issues ((october surprise) (panic in campaign) (bringing hostages home) (winning election) (eleven o'clock news))
  :viewers ((narrator))
  :characters ((Jimmy Carter) (hostages) (honegger))
  :dialog
(As part of my position I was required to cover the eleven o'clock evening news in the operations center. The campaign was afraid that Jimmy carter would successfully bring the 52 hostages home, what we called the October surprise, and win the election. there had been a feeling of panic in the campaign.)
filename "honegger4")

(defclip street1
  :speaker (person 1 on street)
  :positions ((person on street))
  :issues ((television) (lying))
  :viewers ((narrator))
  :characters ((people on television))
  :dialog
(that reason could be anything, I mean they could tell us anything on tv)
filename "street1")

(defclip sarbanes-north1
  :speaker (paul sarbanes)
  :positions ((senator))
  :issues ((authority for the operation) (superiors))
  :viewers ((oliver north))
  :characters ((oliver north)(richard secord))
  :dialog
(just trying to find out where the authorities were coming from to do these activities I mean clearly there was no congressional oversight over this

because it was kept totally hidden from the congress from whom you would have to get the green light in order to make the request or the direction I take it from second to move ahead
:filename "sarbanes1"

(defclip sarbanes-north2
  :speaker (oliver north)
  :positions ((former national security council aide) (lieutenant colonel))
  :issues ((authority for the operation) (superiors))
  :viewers ((paul sarbanes))
  :characters ((oliver north) (admiral poindexter) (william casey)
                 (robert mcfarland))
  :dialog
  (well as I have testified senator I talked to director casey I talked to mr mcfarland I talked to admiral poindexter)
  :filename "sarbanes1"

(defclip street2
  :speaker (person 2 on the street)
  :positions ((person on the street))
  :issues ((contras) (lying))
  :viewers ((narrator))
  :characters ((reagan-bush administration) (oliver north))
  :dialog
  (they say it was to help the contras in Nicaragua but I don\'t believe that\'s true)
  :filename "street2"

(defclip north4
  :speaker (oliver north)
  :positions ((former national security council aide) (lieutenant colonel))
  :issues ((covert operations) (document shredding) (embarrassing evidence))
  :viewers ((congress) (american people))
  :characters ((oliver north))
  :dialog
  (I shredded \, I was never told not to shred I shredded because I thought it was the right thing to do when I didn\'t have a shredder I put it into a burn-bag and they burned \. weren\'t you going through your files to get rid of embarrassing evidence ? embarrassing no \, documents which would compromise the national security of the United States \, documents that would put lives at risk \, documents that would demonstrate a covert action under US direction and control and and relationship to it \, yes \, embarrassing ? no \)
  :filename "north4"

(defclip hall1
  :speaker (faun hall)
  :positions ((former national security council aide) (administrative assistant))
  :issues ((coverup))
  :viewers ((congress) (american people))
  :characters ()
  :dialog
  (I don\'t us the word coverup I would use the word protect)
  :filename "hall1"

(defclip street3
  :speaker (person 3 on the street)
(defclip narrator3
  :speaker (Elizabeth Montgomery)
  :positions ((narrator) (sitcom star) (witch) (Samantha))
  :issues (((iran-contra hearings) (official explanations)))
  :viewers ((television audience))
  :characters ((special joint committee of the united states congress))
  :dialog
  (the iran-contra hearings convened in may 1987 by a special joint committee of the united states congress to investigate the sale of us weapons to iran and the illegal diversion of money to the contras for thirteen weeks the hearings were broadcast on national television over thirty people testified and the committee issued a 700 page report describing its findings but there are still many questions which the select committee left unanswered and unexplored \ often \, the official explanation seemed inadequate and contradictory)
  :filename "narrator3")

(defclip street4
  :speaker (person 4 on the street)
  :positions ((person on the street))
  :issues (((iran)))
  :viewers ((narrator))
  :characters ((us) (iran))
  :dialog
  (iran is a crucial economic \, geographic country the us wants to get them friendly again as quickly as possible)
  :filename "street4")

(defclip street5
  :speaker (person 5 on the street)
  :positions ((person on the street))
  :issues (((memory) (lobotomies)))
  :viewers ((narrator))
  :characters ((witnesses at the iran-contra hearings))
  :dialog
  (they couldn\'t remember they all had lobotomies they nobody could remember anything \, talk about senility ! holy cow !)
  :filename "street5")

(defclip macmichael1
  :speaker (david macmichael)
  :positions ((former cia analyst))
  :issues ((pirates))
  :viewers ((narrator))
  :characters ((secret team))
  :dialog
  (these are modern day pirates these guys they have escaped essentially the control of national governments but they\'re available for use by national governments sometimes they move under color of and uh
defend themselves as advancing us national interests but i think that's very secondary with these guys \ they're out to make a buck)

:filename "macmichael1"

(defclip street6
  :speaker (person 6 on the street)
  :positions ((person on the street))
  :issues ((free the hostages))
  :viewers ((narrator))
  :characters ((reagan-bush administration) (oliver north))
  :dialog
  (I really think their main focus was to free the hostages)
  :filename "street6"
)

(defclip clements1
  :speaker (marilyn clements)
  :positions ((representative of the center for constitutional rights))
  :issues ((coup))
  :viewers ((narrator))
  :characters ((secret team))
  :dialog
  (in any other country it would have been called a coup \ um \ and they seemed to have gotten away with it)
  :filename "clements1"
)

(defclip street7
  :speaker (person 6 on the street)
  :positions ((person on the street) (same person as in clip street6))
  :issues ((iran-contra affair))
  :viewers ((narrator))
  :characters ((american people) (secret team))
  :dialog
  (there is a lot more to the story but whether or not we'll ever find out about it is another question)
  :filename "street7"
)

(defclip narrator4
  :speaker (Elizabeth Montgomery)
  :positions ((narrator) (sitcom star) (witch) (Samantha))
  :issues ((arms to iran) (illegal diversion of profits)
           (us support for the contras))
  :viewers ((television audience))
  :characters ((contras) (cia) (nicaraguan governement) (iran))
  :dialog
  (it was further revealed that the arms to iran had been severely marked up some of the profits had been illegally diverted to support the contras \ a guerilla force organized by the cia fighting the nicaraguan government)
  :filename "narrator4"
)

(defclip north5
  :speaker (oliver north)
  :positions ((former national security council aide) (lieutenant colonel))
  :issues ((covert operations) (secrecy) (denial of a covert operation)
           (press coverage of covert operation))
  :viewers ((congress) (american people))
  :characters ((legal counsel to the house of representatives) (gorbanifar)
              (oliver north) (secret team) (us enemies) (daniel ortega)
              (congress))

  (it was further revealed that the arms to iran had been severely marked up some of the profits had been illegally diverted to support the contras \ a guerilla force organized by the cia fighting the nicaraguan government)
  :filename "narrator4"
)

(defclip north5
  :speaker (oliver north)
  :positions ((former national security council aide) (lieutenant colonel))
  :issues ((covert operations) (secrecy) (denial of a covert operation)
           (press coverage of covert operation))
  :viewers ((congress) (american people))
  :characters ((legal counsel to the house of representatives) (gorbanifar)
              (oliver north) (secret team) (us enemies) (daniel ortega)
              (congress))
(even gorbanifar knew that you were supporting the contras? yes he did \ isvestia knew it \ it had been in the papers in moscow it had been all over danny ortega\'s newscast \ radio havana was broadcasting it \ it was in every newspaper in the land \ all of our enemies knew it and you wanted to conceal it from the united states congress? we wanted to be able to deny a covert operation)

I did do it \ I am not \ as I said in my statement \ at all ashamed of any of the things that I did \ I was given a mission and I tried to carry it out)

(beyond \ that had been kept from me in various covert operations)

(our government has a firm policy \ not to capitulate to terrorist demands \ that no concessions policy remains in force \ in spite of the widely speculative and false stories of our arms for hostages and alleged ransom payments we did not \ repeat \ did not \ trade weapons \ or anything else \ for hostages \ nor will we)

(I\d hate to think as many of my colleagues here have already expressed themselves that in the process we have shredded our own democratic fabric)

"intelligent interface software design workshop"
(defclip brooks1
  :speaker (jack brooks)
  :positions ((us representative from texas))
  :issues ((shadow government) (foreign affairs))
  :viewers ((narrator))
  :characters ((secret team) (jack brooks))
  :dialog
  (I think that ah there was a substantial shadow government trying to run foreign affairs of the united states)
  :filename "brooks1")

(defclip brooks2
  :speaker (jack brooks)
  :positions ((us representative from texas))
  :issues ((shredding) (destruction of documents))
  :viewers ((narrator))
  :characters ((oliver north) (faun hall) (secret team) (jack brooks))
  :dialog
  (they systematically destroyed and shredded all of the documentation \ as much as they could get \ hours of of shredding \ altered some of the documents that remained \ stole what they couldn\'t shred \ now this gives you an indication that there may be a few things that they did that they didn\'t want the public to know)
  :filename "brooks2")

(defclip stockwell1
  :speaker (john stockwell)
  :positions ((former cia covert specialist))
  :issues ((secret sessions of the special joint committee of the united states congress) (cia) (illegal activities))
  :viewers ((narrator))
  :characters ((senator daniel inouye) (chairman of special joint committee of the united states congress) (special joint committee of the united states congress) (cia))
  :dialog
  (anytime they got into anything that was really sensitive about exactly that exactly what the cia\'s role was and exactly what laws were broken and when they went into secret session which means that we \ the people \ won\'t be \ you know \ we won\'t ever know \ like you i don\'t wish to see secrets of this land inadvertently and accidentally made public \ accordingly \ the panel will enter into executive session)
  :filename "stockwell1")

(defclip shredder
  :speaker ()
  :positions ()
  :issues ((shredding))
  :viewers ((narrator))
  :characters ()
  :dialog
  ()
  :filename "shredder")

(defclip street8
  :speaker (person 8 on the street)
(defclip profscott2
  :speaker (peter dale scott)
  :positions ((professor))
  :issues ((iran-contra hearings) (scale of covert operations)
    (scandals and covert operations))
  :viewers ((narrator))
  :characters ((people on the committees) (reagan-bush administration)
    (iran) (contras))
  :dialog
  (both uh the administration and the majority of the people in the committees
   were frightened that the real scandals \, the drugs scandals \, for
   example would really threaten the the any future conduct of covert
   operations on the scale that they had been handled in the past and so
   they were trying very deliberately to limit the damage \, this was
   damage control \, look only at the iran arms sales and the alleged
   diversions to the contras)
  :filename "profscott2")

Taxonomy of Topics

;;; Main Topics in chronological order:

;;; 1. Reagan-Bush campaign arranges the delay of the release of the
    hostages in Iran.

;;; 2. Iran agrees to delay the release of the hostages if the United States
    agrees to sell arms to Iran.

;;; 3. US sells arms to Iran.

;;; 4. US uses profits from arms sales to Iran to support the Nicaraguan
    contras.

;;; 5. Congress begins the Iran-Contra hearings.

;;; Topics

;;; 1. Hostages

;;; 2. Iran

;;; 3. Contras

;;; 4. Secrecy/Lying

(<- (topic hostages-issues (bringing hostages home)))
(<- (topic hostages-issues (cutting a deal with iran)))
(<- (topic hostages-issues (deal with khomeni)))
(<- (topic hostages-issues (delay release of hostages)))
(<- (topic hostages-issues (free the hostages)))
(<- (topic hostages-issues (iran holding hostages)))
(<- (topic hostages-issues (october surprise)))
(<- (topic hostages-issues (panic in campaign)))
<- (topic hostages-issues (reagan-bush campaign)))
<- (topic hostages-issues (winning election)))
<- (topic iran-issues (cutting a deal with iran)))
<- (topic iran-issues (deal with khomeni)))
<- (topic iran-issues (iran)))
<- (topic iran-issues (meeting with gorbanifar)))
<- (topic iran-issues (reagan bush support for iran)))
<- (topic iran-issues (residuals from arms sales)))
<- (topic contra-issues (aid for contras)))
<- (topic contra-issues (cia)))
<- (topic contra-issues (contras tactics)))
<- (topic contra-issues (contras)))
<- (topic contra-issues (foreign affairs)))
<- (topic contra-issues (pressure on nicaragua)))
<- (topic contra-issues (prevent the spread of communism)))
<- (topic contra-issues (support of the nicaraguan resistance)))
<- (topic contra-issues (terrorists)))
<- (topic contra-issues (us support for the contras)))
<- (topic contra-issues (war in nicaragua)))
<- (topic secrecy-issues (albert hakim)))
<- (topic secrecy-issues (authority for the operation)))
<- (topic secrecy-issues (chain of command)))
<- (topic secrecy-issues (cia)))
<- (topic secrecy-issues (coup)))
<- (topic secrecy-issues (covert operations)))
<- (topic secrecy-issues (covert operators)))
<- (topic secrecy-issues (coverup)))
<- (topic secrecy-issues (deceiving the american people)))
<- (topic secrecy-issues (denial of a covert operation)))
<- (topic secrecy-issues (destruction of documents)))
<- (topic secrecy-issues (document shredding)))
<- (topic secrecy-issues (eleven O'CLOCK news)))
<- (topic secrecy-issues (embarrassing evidence)))
<- (topic secrecy-issues (foreign affairs)))
<- (topic secrecy-issues (government policy)))
<- (topic secrecy-issues (illegal activities)))
<- (topic secrecy-issues (illegal diversion of profits)))
<- (topic secrecy-issues (iran-contra covert operation)))
<- (topic secrecy-issues (iran-contra affair)))
<- (topic secrecy-issues (iran-contra hearings)))
<- (topic secrecy-issues (lobotomies)))
<- (topic secrecy-issues (lying)))
<- (topic secrecy-issues (lying to congress)))
<- (topic secrecy-issues (memory)))
<- (topic secrecy-issues (middle-men)))
<- (topic secrecy-issues (national security state)))
<- (topic secrecy-issues (official explanations)))
<- (topic secrecy-issues (overriding the constitution)))
<- (topic secrecy-issues (pirates)))
<- (topic secrecy-issues (press coverage of covert operation)))
<- (topic secrecy-issues (residuals from arms sales)))
<- (topic secrecy-issues (richard secord)))
<- (topic secrecy-issues (scale of covert operations)))
<- (topic secrecy-issues (scandals and covert operations)))
<- (topic secrecy-issues (secrecy)))
(<- (adversary administration expert-witnesses))
(<- (adversary administration former-administration-insiders))

(<- (adversaries ?X ?Y) (adversary ?X ?Y) !)

Montage Rules
(<- (member-wbt ?Item (?Item . ?Rest)))
(<- (member-wbt ?Item (?X . ?Rest))
  (member-wbt ?Item ?Rest))

(<-montage- (narrator-sets-the-scene ?NameOfStartClip ?FinalSequence)
  (issue ?NameOfStartClip ?Issue)
  (member-wbt ?Word ?Issue)
  (narrator-interviewee-couplets ?Word () ?FinalSequence))

(<- (narrator-interviewee-couplets ?Word ?SequenceSoFar ?FinalSequence)
  (narrator-clip ?Word ?NarratorClip)
  (not (member ?NarratorClip ?SequenceSoFar))
  (interviewee-clip ?Word ?IntervieweeClip)
  (not (member ?IntervieweeClip ?SequenceSoFar))
  (append ?SequenceSoFar (?NarratorClip ?IntervieweeClip)
  ?NextSequenceSoFar)
  (narrator-interviewee-couplets ?TopicOfNarratorClip
  ?NextSequenceSoFar ?FinalSequence)
  )

(<- (narrator-interviewee-couplets ?Word ?FinalSequence ?FinalSequence))

(<- (speaker-is-narrator ?Clip ?Narrator)
  (speaker ?Clip (narrator)))
(<- (speaker-is-narrator ?Clip ?Narrator)
  (speaker ?Clip (elizabeth montgomery)))

(<- (narrator-clip ?Word ?NarratorClip)
  (speaker-is-narrator ?NarratorClip ?Narrator)
  (member-wbt ?Word ?IssueOfNarratorClip))

(<- (interviewee-clip ?Word ?IntervieweeClip)
  (speaker ?IntervieweeClip ?Speaker)
  (issue ?IntervieweeClip ?IssueOfIntervieweeClip)
  (member-wbt ?Word ?IssueOfIntervieweeClip)
  (not (= ?Speaker (narrator))))

(<-montage- (point-counter-point ?NameOfStartClip ?FinalSequence)
  (issue ?NameOfStartClip ?IssueOfStartClip)
  (topic ?Topic ?IssueOfStartClip)
  (point-counter-point ?Topic ?NameOfStartClip
  ?FinalSequence))

(<- (point-counter-point ?Topic ?NameOfClip ?SequenceSoFar
  ?FinalSequence)
  (counter-point-clip ?Topic ?NameOfClip ?NameOfNextClip)
  (not (member ?NameOfNextClip ?SequenceSoFar))
  (append ?SequenceSoFar (?NameOfNextClip ?NextSequenceSoFar)
  ?FinalSequence)
  (point-counter-point ?Topic ?NameOfNextClip ?NextSequenceSoFar
  ?FinalSequence)
Video Wall Rules

(←vw- (topic-of-dialog ?ClipName ?Topic)
  (issue ?ClipName ?Issue)
  (topic ?Topic ?Issue))

; issue

(←vw- (group-of-speaker ?ClipName ?Group)
  (group-member ?Individual ?Group)
  (speaker ?ClipName ?Individual))

(←vw- (position-of-speaker ?ClipName ?Position)
  (speaker ?ClipName ?Individual)
  (position ?Individual ?Position))

; character

; viewer

(←vw- (oliver-north-as-speaker ?ClipName (oliver north))
  (speaker ?ClipName (oliver north)))

(←vw- (ronald-reagan-as-speaker ?ClipName (ronald reagan))
  (speaker ?ClipName (ronald reagan)))

(←vw- (contras-as-topic ?ClipName contra-issues)
  (topic-of-dialog ?ClipName contra-issues))

(←vw- (secrecy-as-topic ?ClipName secrecy-issues)
  (topic-of-dialog ?ClipName secrecy-issues))