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EXAMPLES IN THE LEGAL DOMAIN:
HYPOTHETICALS IN CONTRACT LAW

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Abstract

In this paper. we discuss the use of examples
in the law, in particular "hypotheticals" in
contract law. We present a framework for
representing examples, show how this can be
used to generate new hypotheticals, and discuss
their role in the dialectic of refining or
learning legal doctrine.

1. Introduction

Examples are important in many disciplines like
mathematics, law and linguistics. They are
central to reasoning and learning processes
such as induction, concept formation, rule
refinement and theory formation [Hawkins 1980;
Kuhn 1970; Lakatos 1976; Lenat 1977; Polya
1965; 1968; Rissland 1978, 1982; Soloway
1978; Winston 1975].

In the law, where much reasoning is done by
example [Levi 1949] and analogy [Berman 1968].
examples -- i.e., cases -- are indispensable.
Examples force one to consider possibilities
and nuances. In teaching a legal doctrine,
they are used to point out its "gaps, conflicts
and ambiguities" [Kennedy 1980]. They are used
in restatements of the law, which are compendia
of legal doctrine in the form of principles,
examples and references, e.g., Restatement,
Second. Contracts [1981]. They are critical to
the "realist number" which shows both that the
law is much more than a set of clearcut
concepts and rules [Llewellyn 1931], as the
formalists of this century and before had
hoped.

2. Epistemological Considerations

The examples in the law that we consider are of
two types: (1) "real" cases, i.e., cases
actually litigated; and (2) "hypothetical"
cases ("hypotheticals" or "hypos"). Both types
can be represented by a frame-like data
structure [Minsky 1975] and the frames can be
linked together by various types of relations.
In describing frames for cases, we are laying
out a conceptual framework to represent the
knowledge used by students and teachers of the
law.

The frame for a real case· includes the
following slots: Title, Citation, Date, Fact
Situation, Process History/Outcomes, Arguments,

Opinions, Links to other cases, Links to legal
doctrine/rules/statutes. A slot can have a
simple filler, as in the Title, Citation or
Date slots, or a complex one as in the Opinions
which can be structured into main, concurring,
and dissenting opinions. Links to other cases
include "procedural history" links, like
affirmed, reversed, amended, and "substance"
links, like criticised, distinguished,
explained, harmonized, etc., which describe how
the courts through their opinions related the
cases.

Hypotheticals can also be represented by a
frame. The most important features of a hypo
are the Fact Situation, the Arguments that
interpret the fact situation with respect to
particular legal doctrines, and the links to
other hypos and real cases. Thus the frame for
a hypo is like that for a real case. The links
between a hypo and a real case include
"abstracted from". "particularized from".
"generalized from".

One can also make a taxonomy of cases in the
law, much as in mathematics [Rissland 1978].
Such a taxonomy is not explored here, but the
categories might include:

1. standard cases (typically found in the
   casebooks);
2. landmark cases that have far reaching
   effects;
3. first impression cases that bring up
   an issue for the first time;
4. counter cases that show the limits of
   or the invalidity of a rule or
   doctrine;
5. anomalous cases that don't seem to fit
   in.

While we have used some of the link types used
in LEXIS [Sprowl 1976] and legal digests and
case citators like Shepard's Citations, the
framework and taxonomy we have described could
be used to design a legal data base that
reflects more of the structure of the law than
those currently in use.

3. Hypotheticals in Contract Law

In contract law, one master question is "Which
promises should the law enforce?", where
enforcement means either making the promisor
fulfill his promise to the promisee (i.e.,
"specific performance") or make the promisor
pay "damages" to the promisee for his breach
[Fuller and Eisenberg 1981; Knapp 1976].

There are several ways of dealing with this
question. The "gift-consideration" distinction
tries to relate enforceability with the
"consideration" given by the promisee in return
for the promise [Section 17. Restatement,
Second. Contracts]:

"...the formation of a contract requires a bargain in which there is...consideration..."

Another approach is that of "reliance" in which the (typically injurious) reliance of the promisee upon the promise is highlighted [Section 90, Restatement, Second, Contracts]. A third is the use of "formalities" like the legal seal [Section 96]. Each of these ways of looking at the master question emphasizes different aspects of a promise and each has its own stengths, weaknesses, inconsistencies and ambiguities.

The following is a set of hypos (actually just the fact situations) typical of those used in law school to: (1) point out the gift—consideration distinction; (2) show doctrinal weaknesses and ambiguities; and (3) show possible conflicts between doctrines such as consideration and reliance. The hypos are really caricatures of the real case of Dougherty v. Salt, decided by the N. Y. Court of Appeals in 1919, which is a standard case in first year Contract Law (e.g., see [Fuller and Eisenberg 1981]).

In each of the hypos, one is to ask, "Is this promise enforceable?" In other words, if the promisor breaches, ought the promisee be awarded damages or performance?

Hypo1:
Facts: Aunt Tillie says, "Charlie, you are such a nice boy; I promise to give you $10,000."

Hypo2:
Facts: Same as Hypo1 with the addition that Charlie says, "Dear Aunt Tillie, I can't take something for nothing, let me give you my third grade painting."

Hypo3:
Facts: Same as Hypo2 except Charlie offers to mow Tillie's lawn.

Hypo4:
Facts: Same as Hypo2 except that Charlie's last name is Picasso.

Hypo5:
Facts: Same as Hypo1 with the addition Aunt Tillie's assets are in ruin and that keeping her promise to Nephew Charlie means her own children starve.

Hypo6:
Facts: Same as Hypo1 with the addition that Charlie makes an unreturnable deposit on a new car.

If one argues from the standpoint of consideration doctrine, Hypo1 is a paradigmatic example of a pure gift, "a gratuitous promise", which would not be enforceable. Hypo2 is an attempt to make Hypo1 look enforceable under consideration doctrine. Hypo3 is another attempt to alter Hypo1 into an enforceable promise. Hypo4 is used to point out that one is making value judgements on the consideration per contra the doctrine that one should not inquire into the adequacy of the consideration.

Hypo5 introduces an emotional "heart rendering" aspect to show there are limits and exceptions to consideration doctrine, such as duress. Hypo6 introduces an element of reliance which leads to conflicting outcomes from reliance and consideration argumentation.

4. A Frame for Promise Hypos

In applying the framework of Section 2 for the domain of contract law, we used the following facets in the sub-frame for the fact situation of a "promise" case:

1. the status of the PROMISOR
2. the subject matter of the PROMISE
3. the status of the PROMISEE
4. the RETURN ACTION by the promisee
5. the RELATION between the promisor and promisee

The full frame of the case would also include:

1. ARGUMENTS for various outcomes of the hypo according to various doctrines;
2. further NOTES/DISCUSSION of the hypo, such as historical significance;
3. RELATIONS to other cases (real and hypothetical).

Each of these major sub-blocks has facets; those for the PROMISOR and PROMISEE are similar; those for PROMISE and RETURN somewhat so. The PROMISOR and PROMISEE can be further described by such attributes as PERSONAL STATUS, INTENTIONS and BARGAINING POWER, which can be further broken down. For instance, PERSONAL STATUS includes SEX, AGE, MARITAL STATUS (these are for largely traditional, historical and common law reasons related to the once unequal status of women under the law).

The description of the PROMISE includes the subject matter of the promise and conditions on it. The RETURN action of the promisee can be: (1) no action; (2) forbearance (i.e., refraining from doing an act, like suing); (3) an action. An action itself has aspects like: (1) the action benefits or does not benefit the promisor; (2) the action leaves the promisor worse off/better off/the same.

One can also structure the RELATION facet of the promise situation for instance according to whether it is familial (e.g., father—daughter) or non-familial (e.g., debtor-creditor, friends or neighbors).

The following is a fact situation sub-frame instantiated for the first Aunt Tillie - Nephew Charlie hypo:

```
PROMISOR: Aunt Tillie
    PERSONAL STATUS: female, elderly, widow
    PERSONAL ATTRIBUTES: kind, rich
    INTENTIONS: the best
PROMISE: $10,000
    CONDITIONS: none
PROMISEE: Charlie
    STATUS: male, young
RETURN: none
RELATION:
    FAMILIAL: Aunt-Nephew
```

5. Generating Hypotheticals

It is apparent that one can generate new hypotheticals -- that is their frames -- by changing slot fillers in a hypothetical frame. Since the possible fillers for a slot can often be arranged in hierarchies, many modifications can be described in terms of super, sub and sibling node substitution and thus lead to modifications affecting generality and specifity. For instance, generalizing Tillie and Charlie to abstract individuals A and B results in the following:

Hypo1': A promises B $10,000.

Making another change gives:

Hypo1": "JR" promises B $10,000.

In the last, knowing that "JR" (as in Ewing) often has bad intentions creates a hypo very different in "feeling" from the "Aunt Tille - Nephew Charlie" or "A promises B" hypos; the "JR" hypo introduces questions of "good/bad faith".

Elaborating the description of any of the elements of the fact situation is another way a creating a new hypo. For instance, elaborating "Aunt Tillie" to "old, senile Aunt Tillie" and "Charlie" to "manipulative, black-sheep-of-the-family Charlie" gives a very different character to the hypo.

6. Computer-generated hypos

We are currently investigating the generation of hypotheticals using the CEG (Constrained Example Generation) method of "retrieval plus modification", in which a new example is generated by retrieving a known example (that comes close to what is wanted) and then modifying it to meet the current requirements [Rissland and Soloway 1980, Rissland 1982]. So far, we have been dealing only with constraints such as "more/less general/specific" "different but of the same class" (e.g., familial). Higher level constraints are "heart rendering", "more/less surprising" (e.g., against one's default assumptions).

We are experimenting with ways to generate three or four sentence long hypos similar to those found as exercises in casebooks and as illustrations in the Restatements. To produce the English text from the frame, we are currently using sterotypical precanned text templates and then filling in the templates with information from the hypo frame. An example of such a template filled in the most general way is:

" A promises B X in return for Y ."

More sophisticated -- longer and subtler -- hypos will need more sophisticated text generation such as McDonald's MUMBLE [McDonald 1981].

7. Summary and Conclusions

We have been studying the structure of legal knowledge, specifically real and hypothetical cases, using a structural approach of frames and relations and how one generates hypotheticals; we have actually experimented with our ideas in the domain of Contract Law, we feel that these methods are easily transferable to other domains such as Property and Torts.

We feel our work contributes to: (1) a better understanding of the use, structure and generation of examples in general and legal hypotheticals in particular; (2) epistemological analysis of legal domains; (3) legal data base design; (4) hypothetical generation for teaching and ICAI (Intelligent Computer Assisted Instruction) systems.

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