The COLUMBUS Model, *Part I*

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Abstract Weak anticipation is involved (possibly, in more than a way) in texts obeying genre-bound poetic conventions, in the generation of such texts, in their receptions, and possibly in events related in such texts, the events having been conceived not necessarily in a vein of realistic verisimilarity. This paper starts with a situation arising in the reception triggered by two ads contiguously rotating on a signboard; then turns to retracing a schema of how to conceptualize the generation of a text by Rosenzweig, which achieves mock-explanation by ascribing foreknowledge to a character. That literary text combines both mock-etymology and narrative mock-explanation (a humourous aetiological tale), in the form of a learned treatise full of intertextual references to a genre-specific literary canon. An AI formal analysis is sketched for part of its opening page.
Keywords: time granularity, partitioned semantic networks, mock-explanation, literary discourse analysis, intertextuality (humorous pastiche).

1 Advertisement Gone Awry: Intercontaminated Receptions

It's already dark as the traffic proceeds slowly; illumination makes a huge signboard, on the side of the road, stand out and catch your attention. It's the kind of signboard whose surface is cut into a multitude of narrow vertical strips; after a while, all strips rotate simultaneously, and the next ad appears. At this time of the year 2001 on this riverside road in Woolwich, London, and, no doubt, in many other places in this country, a given pool of ads has been posted on signboards of this kind. It may be, however, that the given N ads that are rotating in the given order is peculiar to this particular signboard. At a given time, t_A, the sequence of ads was allocated to it; then, at t_P, those ads were posted there. At times $t_1, \ldots, t_N$, whose own sequence is unknown to me, but all of which preceded t_A, the implementation of the design of each such ad was completed; the integrated textual and graphic design of each such ad is (as usual) intended to arouse, in the members of the public $\{P^f\}$, such receptions $\rho_1^f, \ldots, \rho_N^f$, that, for all of their being subjective (even the same person may react differently to the same ad on different exposures, even though his or her previous receptions of the ad will colour the current one), can be expected to fall within a range, and it's the feasibility of such rough expectations that makes it possible for admen to try and improve on a target function being the advertising value of a given ad. The message is encoded according to the poetic conventions of the genre, for all of the concessions made to a startling effect. Usually (and such is at any rate the recognizable intention of the ads in the situation described at the start) glamour is intended; yet glamour, alas, is vulnerable if an instance

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of the message being conveyed is quickly retorted to so as to thwart the intended kind of reception being achieved, so that the message is deflected into an unseemly alley.

That is precisely what was happening with the given signboard in Woolwich. The image shows, in the forefront, hippos deeply immersed in a river[1] Suddenly, the hippos disappear, and the faces of three attractive young women appear, side by side; this is surely a different ad, whose intended message is unrelated. Yet, the effect on the viewer is shaped by intercontamination because of the temporal contiguity on the same surface, and in particular is influenced by a possible interpretation (even though one is conscious this was unintended) as though this was (as available in a shared repertoire of cultural references) a metamorphosis of three individuals: of the three fat hippos into the three slim ladies.[2] Let $AdvertisingValue(ad_i)=f(Receptions(ad_i, Contexts(ad_i, t), Audience)$, and let $\kappa \in Contexts(ad_i, t)$, where $\kappa = \langle\langle ad_i, ad_{i+1}\rangle, \langle t, t+1\rangle\rangle$, which here stands for a realistically short, two-ad exposure to a signboard with rotating strips. Let there be N ads posted on the signboard (of the given kind) at any time it's in operation. We would be notating the sequence by i mod N and next, $(i+1)$ mod N, where resorting to the modulo operator is because of the rotation cycle, but the reception of a typically short exposure will be possibly affected by just the contiguous context, thus, either $\langle ad_{i-1}, ad_i\rangle$ at $\langle t-1, t\rangle$, or $\langle ad_i, ad_{i+1}\rangle$ at $\langle t, t+1\rangle$. The signboard is already in place: since t_A the unfortunate "trap" for the intended message of ad_i to be thwarted had already been set. When I am watching,[3]

$$Reception(ad_i, AtExposure(ad_i, t), myself) = \\ = Reception(ad_i, \langle\langle ad_i, ad_{i+1}\rangle, \langle t, t+1\rangle\rangle, myself)$$

2 Some Background on Humour and on Narration

I must fit much into the short compass of this paper. More could be said about the above, but in order to be able to turn to an analysis of the construction of a given literary text as intended to elicit receptions by evocative form and content, I'll first provide, in

[1] Presumably in an exotic natural environment. Three items are seen: two hippos, and, further to the right side, aligned on the perspective straight line through the hippos, a car of the brand advertised, parked on the river bank. As the exposure time to the ad is limited (and the viewer's attention span may be even shorter), one may believe s/he saw three hippos.

[2] Unless it's a flashback, or a symbolic image of some unglamorous future state). Even without one's mind groping for, or scuttling to, culture-laden associations of ideas, surely the auratic, glamorizing effect intended for those ads has gone awry. In a sense, this was predetermined at t_A, or at least at t_P. Moreover, that you only notice two (or three) images, while subjected to an upper bound N, is more stringently constrained by your typical situations, as you are driving by, or are on board of a bus. On identity of objects shown in an ad, e.g., "[a] variety of techniques communicate the idea that the named bottle and swan's image share an identity" (Goldman, 1987, p. 704; also see pp. 706–707, on a straight line standing for identity).

[3] Refining the formalism would explicitly represent the fact that reception involves the viewer's reliance on a code of interpretation which the viewer knows is shared with the originator of the message; departing from the intended message because of the incident described provokes, at a meta-level of interpretation, the viewer's conscious infringement of the bona fide rules of communication, and the viewer's not playing by the communicator's rules.

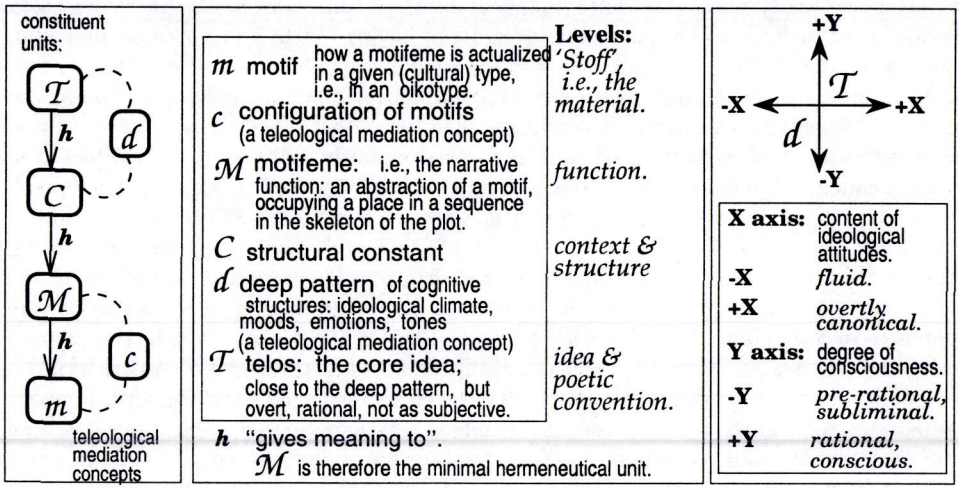


Fig. 1: Basic concepts from thematology or narratology.

Figure 1, a per force perfunctory "crash course" in thematology—or structural narratology (Dolezel, 1972; Ben-Amos, 1980; Elstein and Lipsker, 1994)—and then turn to a very quick overview of models of humour.

I introduce our main example first. Humourist Gerson Rosenzweig [4] in 1888 moved to America and admired the new nation. Yet, he published a biting social satire styled like a talmudic treatise (refer to the next section). We sketch an AI formal analysis for part of its opening page. The start is on a cosmic scale, as the three older continents, personified, have Columbus' discovery made into the Continent of Refuge (cf. the Cities of Refuge set apart by Moses). Columbus has a bout of foresight and is dismayed at the pell-mell of

[4]Gerson Rosenzweig was born in Lithuania in 1861; "he taught Hebrew in Bialystok, and in 1888 he emigrated to the United States", to say it with Ernest Schwarcz (1972). In his new country (he was to die in 1914), Rosenzweig edited several short-lived Hebrew periodicals, and "also edited Hebrew columns in the Yiddish press" *(ibid.)*. "[H]e had a genuine flair for satire and was known to his contemporaries as the 'sweet satirist of Israel' and as a parodist he earned a honorable place in Hebrew literature" *(ibid.)*. The Hebrew modern *belles-lettres,* and prose in particular, In the second half of the 19th century, the Hebrew modern *belles-lettres,* and prose in particular, developed and then flourished in Eastern Europe, continuing afterwards in pre-state and independent Israel; America is not an obvious place even the *cognoscenti* of Modern Hebrew literature would think of as a fertile ground for the same, yet such expectations are unwarranted: see Jacob Kabakoff's book of 1966, and then the Kabakoff Festschrift (Nash, 1988). In the latter, Zvi Malachi's paper dealt with parodies, including Rosenzweig's. (Parodies in Jewish literature in general had been investigated in the U.S. by Davidson (1907).) Kabakoff dealt with Rosenzweig in over fifty pages of his book (1966, pp. 211–266). And Aharon Zeev Ben-Yishai, in his entry on Hebrew parody (1971) which, like Schwarcz's biographic entry, appeared in the *Encyclopedia Judaica,* chose the opening page from Rosenzweig satiric masterpiece for reproduction in his Figure 2 on col. 127. "Epigrammatic neatness was his forte" (Schwarcz, *ibid.),* yet Rosenzweig's humour is impressive also in the broader compass of satirical prose.

future newcomers, some with quite unappealing pasts behind them. He therefore "asks (prays?) for mercy", to be spared the indignity of having his discovery named after him. So it was called 'America'. Rosenzweig mock-etymologizes this name. He proposes, e.g., that 'America' is in relation to the fact that no matter how unappealing the ones who go there, America cleanses up *(memaréket)* their act (other people close an eye if those ones get rich). And so forth, by parodically imitating fairly well-known textual loci from Jewish canonic literature, whose style and narrative devices Rosenzweig's text adopts.[5]

Victor Raskin's "Script-based Semantic Theory of Humor" (SSTH) evolved into a "General Theory of Verbal Humor" (GTVH).[6] In SSTH, two claims were combined: "about a joke bearing text, namely that: • such a text is compatible in part or in full with two different scripts" ('script' being used loosely), and that "• these two scripts are opposite in a specially defined sense" (Raskin, 1996, p. 9). I claim that in the pseudo-talmudic passage analyzed here concerning Columbus and the name of America, intertextuality with traditional texts, along with the emplotting concatenation with previous humorous items in the text at hand, make indeed for competing interpretations based on different complexes of patterns, amenable to scripts in a loose sense. IN GTVH, three developments took place with respect to SSTH: in the first place, "the text of the joke and the script opposition were redefined as two of six knowledge resources (KR's) constituting a joke, Language (LA) and Script Opposition (SO), respectively"; secondly, "four more knowledge resources were introduced, namely, Narrative Strategy (NS), Target (TA), Situation (SI), and Logical Mechanism (LM)"; and finally, "a considerable effort was spent on theoretical justification of the new components and, especially, on their hierarchy" (Raskin, 1996, p. 11).[7] Narrative strategy is to be explicitly incorporated in models of

[5]Developing a formal analysis for this text is of interest **(i)** to *discourse analysis* (scholars are trying to pinpoint the difference between *irony* and *playful quotation:* see in **Part II); (ii)** to *artificial intelligence* (AI specialists along with humour researchers tried to formalize concepts of *humour:* Hulstijn and Nijholt, 1996); **(iii)** to the amenability of prediction or foreknowledge to *weak anticipation* (Nissan 2001a). **(iv)** to *temporal reasoning* research within AI, which arguably would benefit from explicit reference to the *grainsize of time* (Nissan et al., 1999), as well as to the distinction between *narrated time* and *narration time* (Müller, 1948), well-known in *Literary theory.* AI models of humour are at the meet of **(i)** and **(ii).**

[6]Raskin's research from the 1980s resulted in his SSTH. Raskin (1996)—in Hulstijn and Nijholt (1996)—and Attardo and Raskin (1991) proposed GTVH; see also Attardo (1994, 1996).

[7]Broadly speaking, this appears to be congruent with the kind(s) of complex humour involved in the text to whose analysis the present paper is devoted. I leave it to future research to match the example exactly to the GTVH framework, and especially with Salvatore Attardo's (1996) approach to the treatment of humorous texts at large, beyond just jokes. When approaching "the treatment of non-joke humorous texts", thus "breaking the near-total hegemony of jokes in the linguistic analysis of humor", "[i]t seems fairly reasonable to assume that the broad theory to be developed will need to incorporate some technical apparatus which was unnecessary in the SSTH and GTVH" (Attardo, 1996, p. 87). This is not in contradiction with my agreeing with the suitability of GTVH, as Attardo proposes the adoption of two approaches of humorous texts beyond jokes; one of these is the so-called "expansionist approach", which "essentially reduces longer humorous forms to complex cases of jokes, by postulating that the underlying mechanisms of script overlap and opposition are the same across genres" *(ibid.,* p. 95).

humourous texts (as opposed to models of merely jokes).[8] Attardo (1996: Sec. 6.4), while discussing "the complex relationship between plot and humor" (98), remarked about the usefulness "of allowing only certain types of disruptions to count as humorous". He was distinguishing, in line with literary theory, between the *plot* and the *fabula:* "The *fabula* are the events narrated in the text in their chronological order, the *plot* are the events in the order they are presented in the text. Flashbacks, for example, present events[9] that happened before a time T_0 *after* T_0" Attardo (1996) whose coign of vantage is cognitive and in AI, also remarked about how humour is processed in that perspective.[10]

[8]This requirement about strategy applies to analyzing the broader structure of Rosenzeig's opening page in his pseudo-talmudic *Tractate America,* narrative strategy is to be explicitly incorporated. Attardo's (1996) second, "revisionist approach" goes beyond his expansionist approach by "acknowledging the irreducible nature of generic [i.e., genre-related] variation and in incorporating a generic specification in the make up of the humorous text. Concretely, this was accomplished by the inclusion of the NARRATIVE STRATEGY (NS) knowledge resource in the GTVH" (Attardo, 1996, p. 96). "We can define hyperdetermined humor as the presence of more than one active source of humor at the same time" *(ibid.).* A joke features a man carrying around a rifle in New York City. When asked about it, he claims it's to keep elephants away. On being told there are none around, he triumphantly takes this to prove the effectiveness of his plan. Misguided planning was the key for analyzing this and other jokes in Dyer et al. (1986, 1988). Competing possible interpretations are amenable to Raskin's SSTH. Harry Cole (2000) reminisces about a markeplace quack: "He convinced me one Sunday that my teenage acne was early leprosy. I bought a dozen pills for ninepence and he was right. I never did get leprosy". Cole in his old age is jokingly *posing* as though the outcome is proving the quack right, yet as a teenager he allegedly lent credit to the quack's line of reasoning, out of prudence if nothing else. Now, why wasn't America named after Columbus? The explanation Rosenzweig offers is that Columbus didn't want to in the first place. And "indeed", it wasn't named after him... The average reader is likely to know something about Columbus not knowing he discovered a new continent, about cartographers eventually honouring Amerigo Vespucci, and, for that matter, that 'Amerigo' is Vespucci's, not Columbus' first name.

[9]Attardo (1996, p. 98, fn. 14). These are standard notions useful to recall here, just as the following: "Agents' reports, or any narrative structure, involve perspective: the relation between the narrator's time and the events narrated. In literary theory, there is the distinction, introduced by [Müller (1948)], between • the time of the narrative (an interval between the earliest and latest explicitly mentioned events, whether they belong in flashbacks or in the so-called [(Sternberg, 1974)] fictive present, when a narrative (sub)sequence is conveyed to the reader in concrete detail that he or she follows as they unfold), • and the time of the narration, which is the time of the reception of the narrative on the part of a given hearer or reader, a time that notwithstanding this variation is typified by some rate of progress in various stages of the narrative document, in how sketchily or insistently the narration conveys the unfolding events of the time of the narrative. In a biography, multigenerational saga, or usually a historical novel, the ratio between the narrated time and the narration time will typically be higher than in a narrative based on dialogues, such as a play" (Nissan et al., 1999).

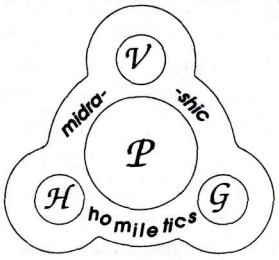
[10]"In any case, the central point from our current perspective is that the development of the plot/fabula is stored in the storage area and is then accessible as a topic of humorous manipulation. For example, coincidences or other highly improbable events, would be avoided in naturalistic narrative, but are normal fare for humorous narrative. Palmer (1987: 115–

3 Rosenzweig's Parodic Works

In Schwarcz's words (1971), "[Rosenzweig's] *Talmud Yanka'i* ('Yankee Talmud', 1907, 1909) poured a stream of ill-humoured sarcasm on the peddler, the teacher, the rabbi. The pages of that collection of satires resembled the pages of the Talmud: the text in large letters, wreather by commentary in Rashi script, is divided into six tractates instead of the talmudic six orders" into which the 37 tractates of the Babylonian Talmud, whose style page layout he set to emulate, are clustered.[11]

140) presents an analysis of *Fawlty Towers* focusing on the highly improbable "bad luck" of Basil Fawlty, the neurotic owner of the hotel who seems always to be having the worst day of his life" *(ibid.,* pp. 98–99). An episode that Attardo discusses involves an unlucky coincidence of three events, whose result is that the actions of innocent Basil are interpreted in a socially very damaging way. "Presumably the information available in the storage area and the known encyclopedic information about the likelihood of events (not to mention their social consequences) interact to mark the above violation of naturalistic narrative conventions as humorous"—which "has the advantage of accounting for metahumor, which can be easily explained as a play on the expectations built by the inclusion in the storage area of the opening sequence of a known humorous sequence/narrative, which are then deliberately thwarted" *(ibid.,* p. 99). Nissan (2000a) is on improbability for police inquiry or judiciary narratives, or then of narratives in fiction, with no relation to humour.

[11] The Babylonian Talmud had evolved over three centuries, from 200 C.E. to around 500 C.E., which was followed by editing over a few more generations. A legal code compiled around the year 200 C.E., the *Mishnah*—each of whose articles of law is also called *mishnah*—is the core of the Talmud (of which two editions exist: the Babylonian Talmud, and the Palestinian Talmud), where the text of an individual *mishnah* if followed by a *gemara,* i.e., an analytical discussion, sometimes including non-legal digressions of the most disparate kinds, known as *aggadic;* e.g., items of scriptural exegesis applied to narratives and extended with homiletic extensions filling narrative gaps. Such narrative aggadic material (or *Midrash Aggadah)* can also be found in a specialized literature: midrashic collectanea dating from late antiquity down to the Middle Ages. Intertextuality—pointing among texts or loci in texts—is paramount in this kind of texts and the related cultural practices. The *Mishnah* includes 63 tractates; about two thirds of them got a *gemara.* Starting with Rashi (1040–1105), of Troyes (in Champagne), the author of the ordinary gloss for both the Hebrew Bible and the Babylonian Talmud, the 11th to 13th centuries in Franco-Germany were the age of the Tosaphists, glossators whose efforts parallelled, on the Jewish side, the endeavours of their contemporaries at the Sorbonne in Paris annotating the *Corpus iuris civilis,* thus further developing Roman Law. Rosenzweig couldn't have done what he did, though, had the Talmud only consisted of a legal discussion; it's quite heterogeneous, instead, and the homiletic genre was fertile ground for Rosenzweig to emulate. "The father of the parody in the style of the Talmud was Kalonymus [ben] Kalonymus, who was born in 1286 and lived in Italy from 1318, and who was one of the outstanding physicians of his time" (Ben-Yishai, 1971, cols. 127–128). His *Tractate Purim* was written in a carnivalesque mood, "to gladden people on Purim"; it "served as a blueprint for imitations of talmudic tractates" (Ben-Yishai, *ibid.,* col. 128). "There is hardly an aspect of Jewish life in America that Rosenzweig does not touch upon" (Ben-Yishai, *ibid.,* col. 136). In his satire, "Rosenzweig also denounced the vulgarisms of the country, the worship of money, the religion of success" (Schwarcz, *ibid.),* even though he also was an admirer of the United States, and in his preface to a booklet of translated patriotic American poetry, "he ventured to suggest that 'the youngest nation is the



Legend:

P: primary text (scriptural narratives).

V: value system.

H: textual hermeneutic.

G: gap-filling, legendary extension.

Fig. 2: What guides Midrashic narrative-making in relation to the given narrative it reworks.

The formal model in this paper is concerned with a passage from the opening page of *Tractate America,* namely, the lines where, to say it with Ben-Yishai *(ibid.,* col. 136), "Columbus refused to have the country he discovered called after him and it was therefore called 'America', deriving from the Aramaic *Amma-Reika* ('an empty people')". This may well refer not just to the vacuousness of the sole pursuit of material success, but also, to what at the time was, Rosenzweig protested, "the low standards of [Jewish] education" (Ben-Yishai, *ibid.)* Rosenzweig was not alone in writing pseudo-talmudic, humorous texts in the U.S.; another example was Gershon Kiss's *Tractate Prohibition,* of 1929.[12] I propose that, quite possibly, Rosenzweig's satiric depictions, to the extent that they insist on communal self-deprecation, share the czarist societal roots that David Aberbach (1993, especially Ch. 3) has identified for novelist Mendele Mokher Sfarim, whose Hebrew prose, on the other hand, also adapts the language and idioms of the Sages of old to mercilessly taunt his contemporary environment.

The Midrash (the narrative elaboration genre) is part of rabbinic literature, and its production spans over one millennium, from late antiquity to the Middle Ages. Items of Midrash are scattered in the Talmud, but there exist as well texts entirely devoted to this literary genre.[13] Midrash is, *par excellence,* a hermeneutic (=interpretive) narrative-

heir of the oldest, and all that was best in the Jewish nation is now in the possession of the American nation to be developed and cultivated for the benefit of all humanity' " (Schwarcz, *ibid.).* Such sweeping admiration is not straighforward; you have to be told about it, especially once you are confronted with the opening page of *Tractate America* from Rosenzweig's *Yankee Talmud*—the page reproduced in Ben-Yishai.

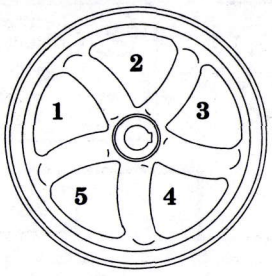
[12]It "depicted [...] the many and diverse maneuvers carried out in order to circumvent the laws of prohibition, as well as the mishaps occurring due to the consumption of noxious drinks" (Ben-Yishai, *ibid.,* col. 136). From Ben-Yishai (1971), I quote a translated excerpt: `''Mishnah.` How does one hide the drinks? One hides them in the walls and under the floor, in pits, ditches and caves, in toilets, bathrooms, and any place out of reach of the city guardians. `Gemara.` The rabbis have taught: The pious men of olden days used to hide the drinks in the walls and under the floor and in pits, bushes, and caves, but pious men of recent times have decided once and for all that there is no hope of storing them, so they immediately store them in their stomachs". On Jewish humour *qua* myth, see Ben-Amos (1973).

[13]Recent scholarship includes, e.g., Boyarin (1990a, 1990b), Faur (1986), Hartman and Budick (1986), Jackson (1987). I have dealt with hypermedia for representing midrashic texts in Nissan et al. (1997) and earlier papers cited there.

retelling genre. In terms of Genette's (1979) model of intertextuality, the Midrash is a *hypertext,* whereas the Hebrew Bible is its *hypotext.* Others call these 'dependent text' and 'primary text', in that order. See **Figure 2.** At scrutinizing Scripture, the midrashic literature in its entirety can be said to practise 'semiotic totalitarianism'.[14] For all that quest for exactitude, hermeneutic criteria in the Midrash exhibit Pindaric flights of association (Rosenzweig's pseudo-midrashic text makes creative use of this, in citing Scripture concerning why there had to be a Continent of Refuge, further to the three Old World continents, just as Moses had to divide the Promise Land into three for the purposes of setting apart Cities of Refuge so those guilty of manslaughter could live there in exile, and killers find there a safe haven until their trial takes place). Moreover, whether or not this is purported to be required by exegetic aetiology, narrative expansions abound. The Midrash takes enough liberties with Biblical characters for, say, a passage to propose, in farsa fashion, an obstreperous showdown, stuffed with hyperbolic threats and dismissals, between Judah and Joseph over Benjamin's fate, whereas the corresponding text in *Genesis* is a masterpiece of expressive restraint, for all of its being the dramatic climax preceding Joseph's agnition (his making his identity known to his brothers). Ginzberg (1968) is a vast coalesced compilation of the midrashic legendary narratives parallelling the temporal sequence of the Hebrew Bible narratives.

Rosenzweig's own purpose is social satire; the grandly cosmic opening (with an imagined plea of the three older continents, who, addressing the Creator, cite Scripture) in his pseudo-talmudic treatise on America lends it the momentum to then shift to the smallishness of the everyday phenomena he is to rebuke. Some ancient midrashic readings

[14] 'Semiotic totalitarianism' is a term of Woodward (1995) on whether in this or that given Russian author "trivia are seen to be highly charged with significance": "In response to this familiar question Popkin rejects the two most familiar answers: that of the 'semiotic totalitarians' who insist that every detail is inherently meaningful, and that of the 'anarchists' who hesitate to interpret the 'verbal clutter' and see 'the point' in the exuberance of the verbal performance." Not every bit of Midrashic interpretation will exploit all detectable details of scriptural expression and story elements it conveys about the narrative; rather, from the multitude of Midrashic texts, a kaleidoscopic interpretive *horror vacui* emerges: every gap in the story is to be filled, the presence of every iot in the written text is to be explained out, and this occurs in a dense multitude of ways in the midrashic corpus, so that alternative or compossible readings (or possible worlds) obtain there for the same passage from Scripture. (For *compossibility,* consider Ian Buchanan's (1994) review of Gilles Deleuze's *Le Pli:* "From Leibniz [...] we get the *fold.* [...] Leibniz, as Deleuze renders his thinking, is a theorist concerned with the problem of the multiple versus the one. 'The multiple is not only what has many parts but also what is folded in many ways' (3). [...] In *The Logic of Sense* Deleuze placed great emphasis on the series as a way of theorizing multiplicity without dissolving into disarray; this view is reiterated here in his uses of the concepts *compossibility* and *incompossibility,* which he says should be understood in terms of either the converging or the diverging of series (60). The series is applicable to the conceptualization of the fold because, as Deleuze defines it, the fold 'is always folded within a fold, like a cavern in a cavern' (6). [...] This logic is applied to Deleuze's explication of monads. [...] 'The monad is the autonomy of the inside, an inside without an outside. [...]' (28). Furthermore, each monad 'includes the world as an infinite series of infinitely small units' [...] All monads 'possess an infinity of compossible minute perceptions, but have differential relations that will select certain ones in order to yield clear perceptions proper to each' (90)".)



1: *Analyze the hierarchy of message-intents.*

2: *Identify a goal/plan structure for the characters.*

3: *Figure out customized criteria of plan-selection.*

4: *Spot idiomatic peculiarities.*

5: *Spot further instances of idiomatic use (or of intertextual reference cue).*

Fig. 3: Steps of analysis of a narrative such as the one given.

were also arguably intended as a medium for a current social critique.[15]

4 A Formal Representation: The COLUMBUS Model

The COLUMBUS model analyzes the sample narrative in terms of a character's goals, plans, and subgoals subserving those plans. Both the text's strategy and the characters (especially, Columbus) have such a goal hierarchy.[16] **Figure 3** shows a cycle of steps for the analysis; not only the plot matters, but also the peculiar style of the sample text, which abounds with adapted quotations or idiomatic patterns. I'll represent the analysis graphically, with an *ad hoc* version of partitioned semantic networks.[17]

[15]Moshe Beer (1976, 1977) has shown how, in Byzantine Palestine, social controversies within the Jewish community were a motivating factor behind opposite midrashic to have been a motivating factor behind opposite midrashic readings of scriptural episodes: Moses' sons (who got no office), and Eli's sons before Samuel's rise, are presented in a disfavourable or favourable light according to whether the homilete was opposed, or defending instead, to the hereditary principle as applied to communal leadership (hereditary posts were a feature of the Eastern Roman Empire in general).

[16]This kind of approach to the narrative structure of a natural-language text is well-known in computational linguistics; one of the best examples is Michael Dyer's BORIS system (Dyer, 1983). Trying to explain out an episode in human behaviour is the task of ALIBI, a program of my own which is fed an accusation and tries to generate an exonerating explanation (possibly, several alternatives); see Kuflik, Nissan and Puni (1991). In Nissan (1996), a paper in whose final section I had announced the COLUMBUS project, an explanation was attempted of why some of ALIBI's output may appear to be humorous. The reason is that ALIBI is trying too hard to justify the protagonist's behaviour even when the evidence is damning. The project reported about in Dyer et al. (1986, 1999), seminal for research in NLP & humour, is a sequel of BORIS, and interprets funny situations (whereas BORIS was just about situations, not necessarily funny) in terms of thematic abstraction units (TAUs) and reasoning on evidence of some character's plan failure; a cue for detecting what is going on obtains, e.g., if a character is described as being upset at some point. In Rosenzweig's text under discussion, we don't need to reconstruct why Columbus is aggravated: we are told so explicitly.

[17]A graphic representation formalism from AI (Hendrix, 1975) known to be amenable to equivalent logic codification. At an upper level, it would be useful to incorporate a representation—resorting to a model of agents' beliefs such as Ballim and Wilks' (1991)—of the propositional attitude "posing as though", possibly in terms of speech act theory, the way I also proposed (in

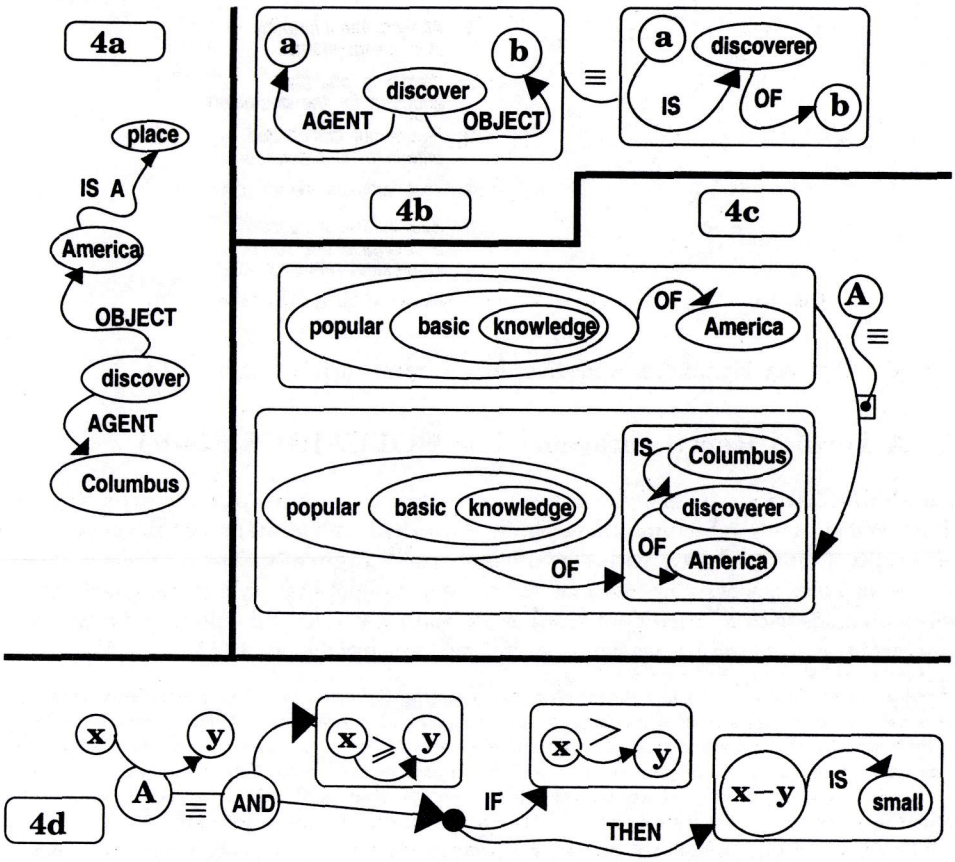


Fig. 4: Chunks of common-sense knowledge about discoveries.

Apart from reasoning and representation, making sense of Rosenzweig's text on the part of its target audience involves not just episodic historical knowledge (Columbus' discovery of America, or, in the author's own times, crowds flocking to America), but also a considerable amount of literary knowledge, though such that it belongs in the standard educational baggage Rosenzweig expected of his reader; hence, the importance of being able to account, in the present analysis, for intertextual references pointing to items from such a literary curriculum. **Figures 4 to 19** illustrate my analysis. In **Figure 4,** the representation in part **4a** states that Columbus is the discoverer of America, which is a place; part **4b** states that "***a*** discovers ***b***," and "***a*** is the discoverer of ***b***," are equivalent syntax; and parts **4c** and **4d** state that popular basic knowledge of America is likely to include (prominently if not exclusively) within its barest core the item

Nissan and Dragoni, 2000) to include it in an augmented version of the JAMA model (Nissan, 2001b), where the pose is not humorous in the least, and is intended to assess a sad story from real life against the paragon of the fiction repertoire.

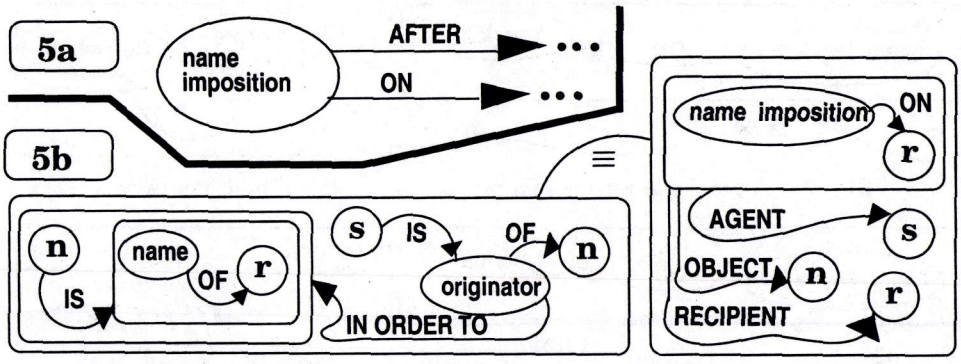


Fig. 5: "Name imposition": definition (5b) and representational syntax (5a).

"Columbus is the discoverer of America". (Part **4c** elucidates the syntax of **4c**.) We need to know that names given to something may be given after somebody or something else. In **Figure 5,** having defined (in part **5a**) "name imposition" as a function of two arguments (the recipient, and what the naming act is after), in a more articulate way a simplified definition of the concept is given (in part **5b**), stating that: if ***s*** is the agent who introduces ***n***, for it to be the name of ***r***, then an event of *name imposition* on ***r*** is taking place, with three arguments: the name-giver who is the agent, the name, and the named object. There are commonsense patterns that are descriptive and possibly prescriptive, too. By using the syntax of name-imposition, in **Figure 6** we express **Rule 1,** to the effect that oftentimes, a discovery bears the name of its discoverer. **Rule 2** states tht *eponymy* may apply to *toponomastics,* and other kinds of name-giving. In fact, cities and other kinds of places, as well as nations, sometimes bear the name of their founder.

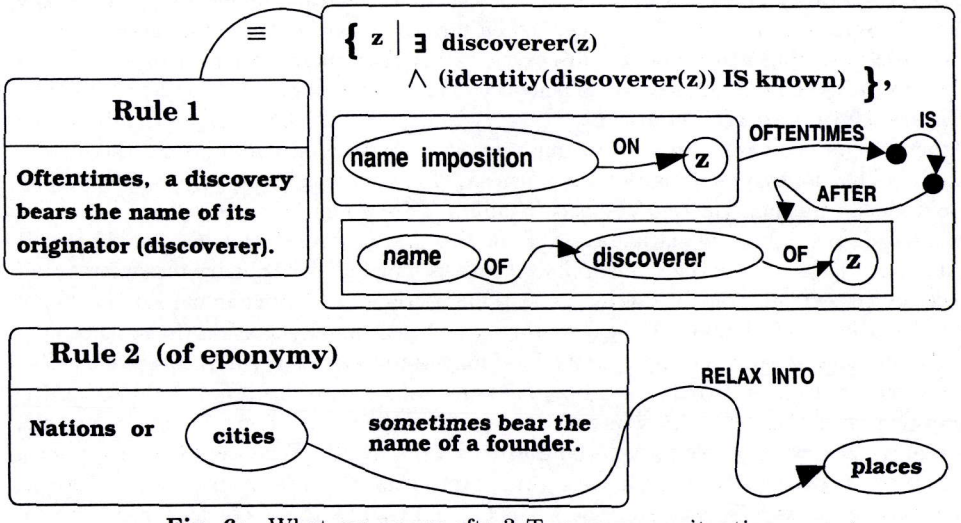


Fig. 6: What are names after? Two common situations.

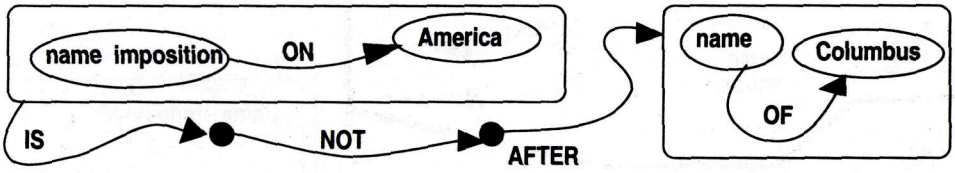


Fig. 7: A graphical version of a proposition exploited by Rosenzweig.

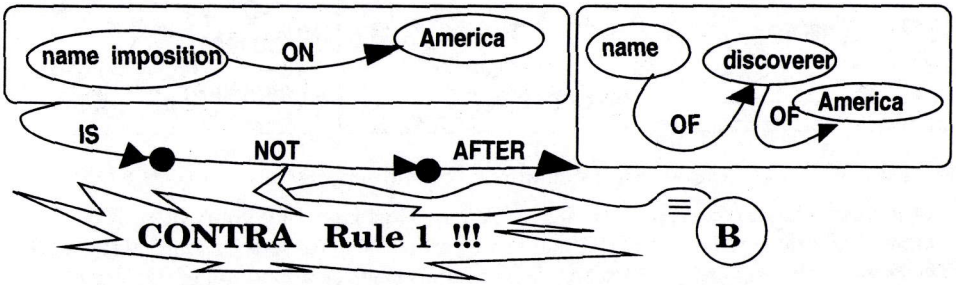


Fig. 8: America's name not being patterned after Columbus' contrasts with an expectation based on Rule 1. This "contravention" is notated as B in other figures.

Nevertheless (see **Figures 7 and 8**), the event (or at the very least, the event whose effect was to last) of name-imposition that applied to America was not after the name of Columbus, but rather of somebody else; we detect a violation of the rule on things being named after their discoverer. We are to refer to that violation by $\boldsymbol{B}$, in the formalism. **Figure 9** states that by default, the most relevant thing about America is that it's a place, but in the conceptual context of Columbus, the most relevant thing about America is it's a discovery. This is a factor that affects an IS-A relation, if the context is: "Why isn't America's name after Columbus?", then the particular instance of name-imposition we are considering is one about a discovery, rather than merely about a place (such as the land of America), or even on a person (which cannot apply to America). Refer to **Figure 10** (in Part II). Let goal $\boldsymbol{G_1}$ be: "Try to explain out the contradiction by which America was not named in a way complying with the rule on naming after the discoverer". (That is, by posturing, for the purposes of Rosenzweig's humour, as though only Columbus, while not Amerigo Vespucci, qualifies as discoverer.) There are two alternative plans to achieve the explanation goals. Plan $\boldsymbol{P_1}$, that is, explanation $\boldsymbol{E_1}$, would say: it just didn't happen, and the rule admits exceptions happening. Ordinary reasoning would pick up this explanation. In contrast, selection criteria which belong in parody (or should I have rather said: humorous text) would rather select an explanation that is puzzling, as it provides it with an opportunity for funny elaboration, which becomes goal $\boldsymbol{G_3}$. Explanation $\boldsymbol{E_2}$ has it that Colombus was pursuing a goal of his, $\boldsymbol{G_2}$, of thwarting the prevalent situation by which you name things after their discoverer. Columbus enacted a plan to achieve $\boldsymbol{G_2}$. Next, consider **Figures 11 and 12.** Whereas $\boldsymbol{G_2}$ is a goal of a character, $\boldsymbol{G_3}$ is a goal of the text, or rather of its author when that author was writing it. The plan to achieve $\boldsymbol{G_3}$ consists of subgoals $\boldsymbol{G_5}$ and $\boldsymbol{G_6}$. Of these, $\boldsymbol{G_5}$ is: "Try to explain out why Columbus entertained the goal of not having the place he discovered named after

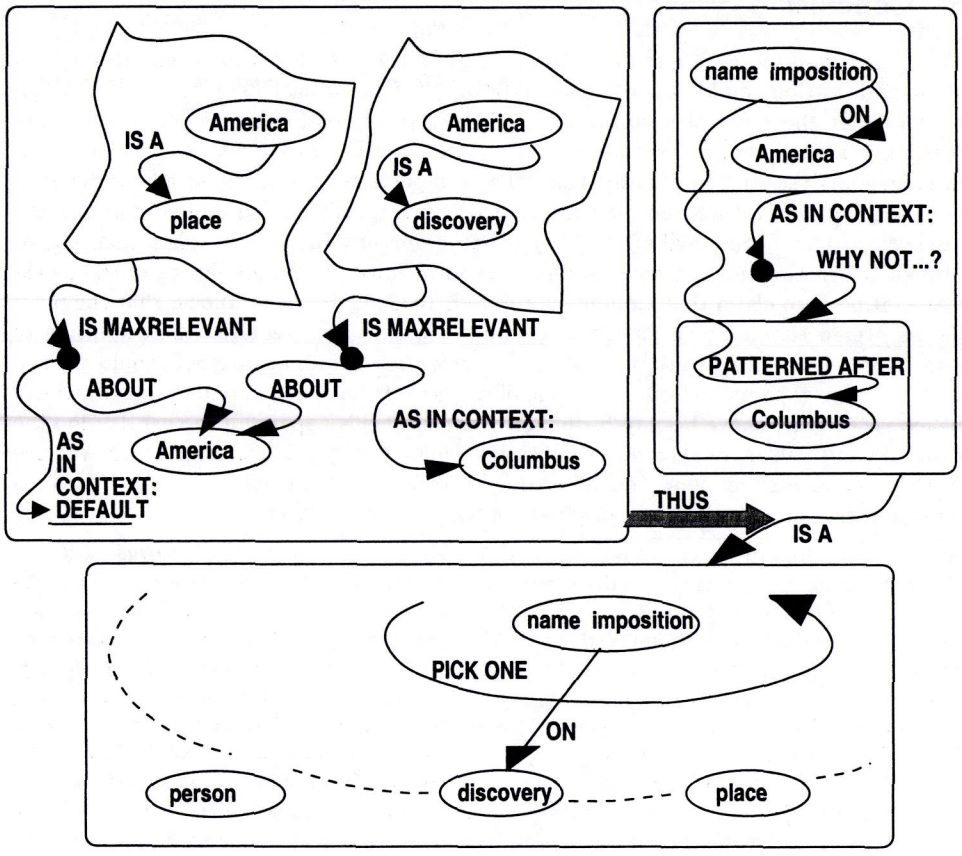


Fig. 9: Just 'America' is a place, but when co-occurring with 'Columbus', the category 'discovery' is more prominent: naming, in the example, is of a discovery.

him". The explanation proposed is that Columbus had G_7, a preservation goal, active, it being a goal to protect his reputation. Once you sort out why he wanted to achieve G_5, you are left with G_6 : the task of explaining how he achieved that.[18]

[18]One stratagem to that effect could be: be unkind to the name-givers, so they would take revenge and deny you your due. In Rosenzweig's case, as he was patterning his style after a given literary repertoire, he had to stick to the devices and, to some extent, the content of the Midrash. A path which leads there is that Columbus asked or prayed for mercy, and his prayer was heard (which, if we take this to have been a prayer, instead of a request to his fellow-mortals, assumes he was a positive character), and anyway his request was granted. (There are factors not shown: reversal of expected attitudes is a device in humour.) Let us go back to the Columbus character's goal G_7, of protecting his reputation. There is a cause that has to be found, and there is the intended effect: Columbus wanting America not to be named after him. The cause could be (and it suits the association with prayer in Midrash): association with

5 Conclusion

This paper, on literary non-realistic treatment of foreknowledge (this being amenable to weak anticipation) builds upon Nissan (2001a).[19] Our subject here, the COLUMBUS model, is at the meet of a cultural use of descriptions of foreknowledge, and human reasoning in interpreting or concocting narratives which fit in particular categories within discourse analysis and literary analysis. The sample narrative analysed here develops a mock-explanation for a given, namely, why America wasn't named after Columbus, the discoverer. The overall goal of the humourist, in devising the mock-explanation, was to provide a befitting initial framework for a satirical work. The main device of the mock-explanation is to claim that Columbus saw to it that his desire be known that the place he discovered shouldn't be named after him. This, in turn, required the ascription to him of prescience of a future state of affairs, such that Columbus himself should wish to dissociate his good name from the locale of something that was going to happen and can be expected not to have been of his liking. **Part II** of this paper will further develop the analysis, and will more generally discuss the function of mockingly ascribed prescience in the discourse of humour, including its generation, and possibly even the humorous interpretation of something not originally intended to that effect.

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an item fallen into disrepute would threaten Columbus' own reputation. Nevertheless, at the times of Columbus, America as a discovery was *not* direputable (in the fiction concerned. We know instead that he worried about it being known that he wasn't in the Far East as yet, and that on discovering Cuba, he imposed the death penalty on any of his companions in case they would state is was just an island, not the mainland.) Rosenzweig's main claim in the passage concerned is that America, in his own times, *is* disreputable, and this applies to the people, and in particular to the people who went or were still going there. This makes it necessary for Columbus to be endowed with foresight. Again, supernatural intervention is available and even desirable, in the midrashic repertoire of devices. **Figures 10 ff** are in Part II of this paper.

[19] In vol. 8 of this journal. From fiction, Nissan (2001a) mentioned such examples of time leap as Rip van Winkle's, or the one about another long-sleeping character, Ḥoni the Circle-Drawer, from late antique Jewish tradition; to these we may add a similar ancient story about Epimenides, who like Ḥoni, is also a historical character. I had mentioned as well that patients awakening in old age from their young-age coma due to lethargic encephalitis, are sadly quite real. Also discussed in Nissan (2001a) were visions of the future in science fiction; see, e.g., Veronica Hollinger's statement, in her essay (1987) on H.G. Wells's *The Time Machine:* "It is first necessary to 'read' time before writing a time-travel story: within the terms of a set of metaphors suggested by Roland Barthes, one can conclude that stories which support the classical Newtonian definition tend to read time as 'work' ('oeuvre'), while stories which explore the Einsteinian paradigm of physical reality tend to read time as 'text' ('texte'). Within the classical paradigm, time is linear, homogeneous, and uncentered. Relativity may thus be identified with free play and différance, the (non)principles of the Derridean 'post-structure'." (SF author Stanislaw Lem's essay "Metafuturology" (1986) was concerned with prediction, thus weak anticipation of scholarly disciplines, when stating: "There is a great need for a metafuturology — which will study the limits and possibilities of scientific prediction".)

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