

Searching for Storiness: Story-Generation from a Reader's Perspective

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Abstract

Previous work in the field of automatic story-generation has largely neglected reader-response as an important aspect of the success of a story. This paper describes an approach to automatic story-generation based on an intuitive model of the cognitive states and processes within the mind of an imagined reader of the story. Generation assumes a privileged access to the responses of the reader, and proceeds by heuristically searching for story elements which create preferred abstract 'storiness' effects for the reader. It is claimed that the model is sensitive to the idiosyncracies of individual readers, but also that it captures useful general properties of stories. Previous work in the field of automatic story-generation is briefly reviewed, and this new model is placed in context. The model is then motivated, and described in more detail. Finally, the strengths and weaknesses of the model are discussed, and issues of implementation are summarised. The model described in this paper is work-in-progress as part of a PhD at the University of Edinburgh.

Introduction

"The novelist droned on, and as soon as the audience guessed what happened next they either fell asleep or killed him." (Forster 1990)

E.M. Forster, attempting to capture the particular challenge of being a storyteller in a primitive oral society, focuses not on the intricacies of story-construction, or stylistic nuances, but on the interface between author and reader; on the moment when a story has its *effect*. Moreover, he attributes the success of a story—one might say its 'storiness'—to the reaction from its audience.

An analysis of narrative by (Kintsch 1980) strongly echoes Forster:

"The second factor to be considered concerns the uncertainty a paragraph generates in the reader. Again the effect is nonmonotonic. If the continuation of a paragraph is completely predictable, one should assign it a low cognitive interest score. On the other hand, if one has no expectations at all about how the text is to continue, this is not very interesting either. Somewhere in between, where specific conflicting expectations exist, interest peaks. . .

Interest in a story derives mainly from the unpredictable but well motivated turn of events; conflicting expectations are aroused in the reader about where it is all going and what will happen next." (Kintsch 1980)

Further echoes come from the consciously distilled, plot- and character-driven context of modern screenwriting:

"The energy to process a story is the result of *questions* forming in the audience's negative space in reaction to story information. The audience members ask themselves questions in order to get themselves oriented, work their way through a myriad of information, and figure out what's important and what's not. . .

Additionally, the audience will not only have questions, but their minds will attempt to provide possible answers as well. . .

Audiences not only try to guess the right answers, but one of the reasons they stay with a story is to see if they are right. It's almost as if the story becomes a game in which they bet on the outcome and therefore have something at stake." (Cooper 1994)

In each of these cases, taken from hugely diverse disciplines, the appropriate reaction of the reader to a story is presented as an essential determinant of the story's success. This assumption forms the core of the model described in this paper.¹

This paper describes an approach to automatic story-generation based on the twin assumptions that it is possible for the generation of a story to be driven by modelling of the responses to the story of an imagined target reader, and that doing so allows the essence of what makes a story work (its 'storiness') to be encapsulated in a simple and general way.

¹Due to a mixture of space constraints and plain cowardice, I don't intend to make reference (apart from this footnote) in this paper to the approach of literary reception theorists. Despite superficial similarities in intent ((Eagleton 1996) describes the position of Stanley Fish thus: "The true writer is the reader: dissatisfied with mere Iserian co-partnership in the literary enterprise, the readers have now overthrown the bosses and installed themselves in power. For Fish, reading is not a matter of of discovering what the text means, but a process of experiencing what it *does* to you."), fundamental differences in approach between literary theory and AI would result in any comparison allowed by available space underselling both sides.

The model described here is work-in-progress as part of a PhD at the University of Edinburgh. This paper has three main sections. Firstly, a brief—and necessarily incomplete—review of the existing work in the field is provided. This is followed by a motivation of the main concepts within the model. Thereafter, the model itself is described and discussed.

A brief review of previous work

Previous work in the field of automatic story-generation may be divided informally into three groups²:

1. **Author models**, in which the task of story-generation is approached from the perspective of a (human) author, and an attempt to model the processes undergone by the human author during the creation of a story, whether consciously or otherwise, is believed to be fundamental (Lebowitz 1985; Dehn 1989; Turner 1994; Pérez y Pérez & Sharples 1999).
2. **Story models**, in which story-generation proceeds from an abstract representation of the story as a structural (or linguistic) artefact. This approach is best exemplified by those generation systems whose basis is a *story grammar*, somewhat analogous to a generative sentence grammar (Colby 1973; Rumelhart 1975; Pemberton 1989; Lee 1994). ((Wilensky 1983), and the subsequent discussion, is an exhaustive analysis of the linguistic attributes of story grammars.)
3. **World models**, in which the task of generating a story is approached obliquely, by constructing a ‘world’, and the characters within it, and imbuing them with (it is hoped) sufficient agency and complexity to result in their actions and interactions becoming representable as a story (Meehan 1976; Okada & Endo 1992).

Despite the considerable differences between these model types—and for that matter between models of the same basic type—two common attributes of previous story-generation systems are discernable, and will be contrasted with the model described in this paper.

Firstly, previous models rely heavily on a *planning* paradigm of story-generation. This manifests itself either as a model of the human authoring process as a goal-driven planning activity ((Dehn 1989; Turner 1994) are good examples), as a model of goal-driven planning by some characters within a story-world (Meehan 1976; Okada & Endo 1992), or as the hierarchical decomposition of plans and sub-plans represented by the rewrite rules of a story grammar (Rumelhart 1975; Pemberton 1989).

Secondly, and more importantly, previous models fail to—or do not attempt to—approach a worthwhile encapsulation of *general* storiness. The extent to which a model under- or overgenerates is a good measure of how far it is away from such an encapsulation. The two most celebrated

²I’m deliberately omitting from this review any of the recent work in the related but distinct field of *interactive* story-generation (Sgouros, Papakonstantinou, & Tsanakas 1996; Mateas 1997), whose methods and aims are somewhat different from those of non-interactive story-generation.

models of generation to date respond very differently to this challenge.

TALE-SPIN (Meehan 1976) overgenerates considerably, since the model itself actually has no intrinsic sense of what makes a story. Important choices about what happens to the characters in the TALE-SPIN world are devolved interactively to a human user, and the quality of the generated story derives from a mixture of human guidance and serendipity.

MINSTREL (Turner 1994) undergenerates somewhat, but also because the model has a very limited sense of what makes a story. Literary garnish of effects such as ‘suspense’ and ‘foreshadowing’ enhances a story-structure generated by a process of sophisticated case-based template-filling. But the templates *themselves* carry the weight of the story, and these are pre-fabricated for MINSTREL by a human user.

There is an implicit third commonality of previous models which contrasts *most* strongly with the model presented in this paper: they take no account of the effect of a story on a reader.

The following section will attempt to provide motivation for a model of story-generation which is based not on a planning paradigm, but on a paradigm of heuristic search; which focuses on the goal of general storiness; and which takes account of—which is driven by—the effect of a story on its reader.

Motivation for a reader-model of story-generation

How do we know that we’ve heard a joke? Well, because we laugh. Or smile, or groan, or some combination of all three.³ And if our neighbour doesn’t laugh, does that make it any less a joke? For him, yes—perhaps he doesn’t understand some reference, or perhaps the subject matter has unfortunate personal associations—but hardly for us. If the joke genuinely does not work for one person, whilst causing another to laugh uproariously, is its jokiness in question?

Of course not. It merely doesn’t make any sense to consider the jokiness of a joke in isolation from the sense of humour which processes it. A sense of humour is so clearly the possession of an individual—yet theories of humour abound which claim that jokiness is an *intrinsic* property of the artefact.

A lack of reaction to a joke is neither the fault of the hearer (not ‘getting’ the joke), nor a diminishment of the joke itself. Both joke and hearer contribute to the jokiness, and without either, jokiness cannot exist.

An extension of jokiness to storiness is not unreasonable. Both jokes and stories are creative linguistic artefacts which rely for their effect on subjective cognitive processing by a suitable hearer. Jokes work against a background of the hearer’s knowledge, opinions and preconceptions, as do stories.

Given that the complex of joke/story and hearer must be considered part of the jokiness/storiness phenomenon, the

³Aside: I don’t mean to imply that the three are equivalent. There are very interesting and important differences between laughing at one joke and groaning at another.

crucial moment in the process is where they meet: where the joke/story has its *effect*, and the hearer reacts. This purely functional view assumes that *whatever* has the appropriate effect, can be considered an artefact of the appropriate type. Whatever creates a jokiness effect for me, is a joke for me. And whatever creates a storiness effect for me, is a story for me.

So to approach an accounting of *general* storiness, it seems useful to focus on the point of interaction between story and reader, to consider what a story does to a reader, rather than its intrinsic structure or content.

This presupposes, of course, that we *can* consider the effect of a story on a reader; that we can gain sufficiently privileged access to the reader's cognitive states and processes that we are able to determine whether the appropriate storiness effects are present. The ability to do exactly that is assumed by this model.

But if we do make this assumption, then not only can we determine whether the appropriate storiness effects are present, we can use this ability to *search for* artefacts which create those effects. And this ability is, of course, exactly analogous to *generating* those artefacts, assuming a rich enough space of possibilities to search within.

If we make a further assumption that the storiness effects can be observed during the course of the telling of a story—which is scarcely a further assumption at all, since storiness effects *are* a continuum throughout the processing of a story—then the generation of a story can proceed by a gradual step-by-step process of informed heuristic search deeper into the search-space.

This, then, is the basic principle of the reader-based model of story-generation described in this paper: heuristic search through a space of possible stories, guided by preferences for appropriate storiness effects within the cognitive processing of the generated story by an imagined reader.

The next section will describe the model in more detail, including the method of generation of the search-space of possibilities, the storiness effects used, and the heuristics which guide the search.

A description of the model

This model of story-generation proceeds by controlling the cognitive responses of an imagined reader, to which it is assumed to have privileged access.

The raw material for generation is a body of world-knowledge considered to belong to the imagined reader, to represent the reader's assumptions, opinions, beliefs, everything he knows about his world. This world-knowledge is manipulated to produce a search-space of possible story fragments, which is navigated using an informed best-first search according to abstract storiness preferences.

The *product* of generation is a logical representation of the plot of a story, composed of a sequence of logical assertions about events and characters within the story-world. The imagined narrator of the story is considered to be trustworthy, so each assertion carries the weight of truth about the story-world, and the accumulation of knowledge carried by these assertions is monotonic.

Within the model, reader-response is defined in terms of:

- **expectations**, which are logical inferences made by the imagined reader of the story from the asserted knowledge which comprises the story-so-far; and
- **questions**, which are considered to be reader-response phenomena emergent from specific patterns of expectations, and which may be glossed as natural-language 'WH-questions', such as 'Which?', 'Why?', and 'When?'

It is assumed that each component of the reader's knowledge-base is assigned a **strength**, which represents how strongly the reader believes it holds true. The reader's expectations and questions which result from his processing of the story-so-far are consequently assigned strengths based on the strengths of the premises for their derivation.

Abstract storiness heuristics defined in terms of the number and strengths of derived expectations and questions throughout a story are used to guide a best-first heuristic search which controls generation.

It is not assumed that generation of a surface-text rendering of a story will form part of this model.

The cycle of story-generation

The generation of a story according to this model follows a cyclical scheme. One loop of the cycle corresponds to the generation of single **segment** of the story. (No assumption is currently made about the allowable size or content of a segment.)

The cycle has four steps:

1. A search-space of possible next segments is generated from the reader's knowledge-base.
2. The effect of each of these possible next segments, in conjunction with the assertions in the story-so-far, on the patterns of expectations and questions derived by the reader, is analysed.
3. The segment which produces patterns of expectations and questions which best fit the patterns preferred by the abstract storiness heuristics is chosen.
4. The chosen segment is asserted as the next segment of the story. The reader's expectations and questions are updated to take account of the new segment.

It is assumed that some degree of look-ahead will be built into steps 1 and 2, so that the choice made in step 3 can be as informed as possible. This means that, though the result of each cycle will be the generation of a single segment of the story, generation of the search-space of possible next segments will be deeper than the next segment.

Since the search-space is likely to be very large, it is expected that look-ahead will be necessarily quite constrained—though this depends a great deal on how much principled pruning of the search-space can be performed.

The reader's knowledge-base

It is intended to be a strength of this model of story-generation that it makes as few assumptions as possible about the representation of knowledge by the imagined reader. This will allow the model to be as portable as possible across different readers and different story domains,

and to be defined independently of specific representation languages.

The representation will remain as close as possible to first-order predicate logic. Simple extensions will be used to:

- Represent temporal relations between sentences.
- Represent the strengths with which knowledge is held to be true. A scale of zero (least strongly-held belief) to one (most strongly-held belief) will be used. These strengths will form the basis for the derivation of strengths of expectations and questions in response to a story.

Generation of the search-space

During each cycle of story-generation, a search-space of *possible* next story segments is generated. This search-space is intended to represent everything the reader is capable of conceiving of, and is generated by manipulation of the reader's knowledge-base.

Such manipulation is performed by composition of four primitive operators:

1. **Generalise**, which generalises a sentence by replacing some part of the sentence with a more general concept within the taxonomy.⁴ For example, in:

All birds can fly

generalise *birds* to *animals*, to give:

All animals can fly

2. **Specialise**, which specialises a sentence by replacing some part of the sentence with a more specific concept within the taxonomy. For example, in:

All animals can fly

specialise *animals* to *humans*, to give:

All humans can fly

3. **Detach**, which generalises a sentence by deleting part of it. For example, in:

Some cheese is smelly and has holes

detach *smelly*, to give:

Some cheese has holes

4. **Join**, which produces a specialised sentence by joining two other sentences. For example, join:

Some things are human

and:

Some things are smelly and have holes

to give:

Some humans are smelly and have holes

Such operators clearly don't maintain truth, but that's not their purpose. They are used to generate sentences from other sentences, and that's all. The only restriction on their use will be that the result of applying an operator must be syntactically valid.

Beyond that, their application is intended to be as promiscuous as possible, so that the search-space they generate can

be as diverse and creative as possible. Apart from syntactic validity, the only criteria by which the generated sentences may be judged are those which relate to how the reader responds to them in the context of the story. If the assertion of a generated sentence within the story-so-far creates the preferred pattern of expectations and questions, the sentence is a good one; if not, it isn't.

The structure of the story-so-far

The **story-so-far** is the knowledge structure which grows as the story is generated. Its construction may be compared with the generation of the story, though it contains more than just the story itself.

The story-so-far contains:

- The story segments generated so far which comprise the logical representation of the story itself. These assertions are considered to represent statements of truth about the story-world. They increase monotonically as the story is generated.
- Representation of the expectations and questions derived by the reader in response to the story segments. Expectations and questions are *not* part of the story itself, and do not represent truth about the story-world. They do not increase monotonically. Each expectation and question has attached to it a *strength*, determined by the premises and mechanism by which it was derived.
- Representation of the justifications for the derivation of expectations and questions.

During a single cycle of story-generation, the story-so-far is used in the following ways:

- As each possible next story segment is analysed to assess its effect on the response of the reader, the segment is tested on the story-so-far. The candidate segment is added, as if it *were* the next segment, and the changes to the patterns of expectations and questions are determined. The patterns of expectations and questions for each candidate segment are used to heuristically choose the preferred story segment.
- When the preferred story segment is chosen, it is added to the story-so-far as asserted truth about the story world. The reader's expectations and questions are updated in response to the segment: some new expectations and/or questions may be created; some existing expectations and/or questions may be deleted or modified.

What is an expectation?

An **expectation** is nothing more than something which the reader's knowledge-base allows him to infer about the story-world, from existing story segments (asserted as truth), from other expectations about the story-world, or a combination of both.

The key point here is that the reader cannot infer *truth* about the story-world. Once through the looking-glass, into the story-world, whatever he infers, however strongly-held the premises, and however reliable the inference rule, can only be *expected* to be true. So there is a very clear distinction in the representation between story segments, which

⁴The existence of a hierarchical concept taxonomy is assumed.

are asserted as true within the story world, and expectations, which are the reader's provisional inferences about the story world.

Each expectation carries a strength, intended to identify how strongly it is expected to be true. Such strengths are derived from both the strengths of the premises which license the expectation, and from any inference rule used.

It is assumed at the moment only that the strength of an expectation: increases with the strength of the premises; and increases with the strength of an inference rule.

Expectations may be derived: entirely from assertions within story segments, in which cases the premises will all be true; entirely from other expectations, in which cases the premises will themselves all have reduced strengths; or some combination of story segment assertions and other expectations. It follows that expectations derived from other expectations will in general have lower strengths than those derived from assertions.

Where an expectation is derived from multiple independent premises, or by disjunction or conjunction of premises, the derivation of the strength of an expectation is more complex. Clearly: the strength of a derived expectation should increase where there are multiple independent premises for the expectation; and the strength of an expectation derived from a conjunction or disjunction of premises should increase where the premises are themselves strong.

Beyond these simple assumptions, the mechanisms for derivation of expectation strengths are not yet defined.

What is a question?

A **question** is considered to be an emergent phenomenon which occurs when certain patterns of assertions and expectations exist within the story-so-far. Even though the reader might not be aware of asking such a question of the story, it is proposed that such questions are a significant aspect of his response to a story.

Three different types of questions are proposed, which derive from different features of the story-so-far:

1. **Missing filler:** a question arises when an assertion within the story-so-far, or a derived expectation, creates a structure with an expected (according to the reader's knowledge-base), but absent, filler. This might be glossed as a 'What?' or 'Who?' natural-language question. For example, if it is asserted within the story of a shoemaker⁵ that a pair of shoes is magically sewn during the night, the absence of an expected (by the reader) 'maker' for the shoes would create a question, glossed as: 'Who made the shoes?'
2. **Multiple fillers:** a question arises where assertions and/or expectations within the story-so-far create a structure in which multiple potential fillers for a specific slot are present. This might be glossed as a 'Which?' natural-language question. The stereotypical murder-mystery contrives to create a plausible murder-motive for each major character. This would create a question, glossed as: 'Which one of them is the murderer?'

⁵The Brothers Grimm's *The Elves and the Shoemaker*.

3. **Unexpected filler:** a question arises where assertions and/or expectations within the story-so-far create a structure in which an unexpected (and therefore anomalous) slot filler is present. This might be glossed as a 'How?' or 'Why?' natural language question. Dorothy wakes from the tornado and finds herself not in Kansas, but somewhere rather different: 'How did she get there?' And 'Where is she?'

Questions are perhaps best considered to be *markers* of interesting (from the perspective of stories) patterns within the story-so-far, rather than distinct knowledge or expectations. They are nevertheless considered to be extremely important to the essence of a story, and it is assumed that their manipulation will be a dominant preference of the abstract storiness heuristics used by this model.

Questions are represented within the story-so-far only so long as the patterns they mark exist within the story-so-far. Like expectations, they do not increase monotonically.

Also like expectations, each question carries a strength, which is considered to represent its significance.

Abstract storiness heuristics

The best-first search which guides the generation of a story is driven by an attempt to satisfy high-level storiness heuristics. These heuristics are defined entirely in terms of the patterns and strengths of expectations and questions during the course of the generation of a story. In this case, the goal of the best-first search isn't some destination point, such as a winning chess-board or a maze location. The 'goal' is the entire game/journey: the pattern of expectations and questions which represents the response of the reader throughout the entire duration of the story.

It is intended that considerable empirical investigation will be carried out during the remainder of the research into what heuristics are effective. No substantial assumptions are made at the moment. I do believe that the apparently-primitive expectations and questions supported by this model are rich enough to allow abstract storiness heuristics to be defined in quite elaborate ways.

At the time of writing, a number of basic assumptions are being made:

- Expectations and questions should be kept separate within the storiness heuristics, so that they can be independently-preferred. There's no *a priori* reason to expect that they inhabit the same dimension, or that they are somehow interchangeable.
- The pattern of questions during the story is expected to be a dominant heuristic—far more than the pattern of expectations. The ability of expectations to give rise to questions is likely to be their principal contribution to the model.
- Expectations alone, without questions, do *not* necessarily produce a story: a narrative which contained nothing but unproblematically realised expectations would not constitute a story.
- The curve of the neo-Aristotelian Freytag triangle (figure 1), introduced in (Freytag 1968) and revisited appo-

itely by (Laurel 1993), will provide a useful initial place for exploration of storiness heuristics.

A first-order heuristic might prefer a pattern of both expectations and questions in which their cumulative strengths trace the triangle during the course of the story. This corresponds naturally with the conception of a story as a journey from stasis, through complication, and back to stasis.

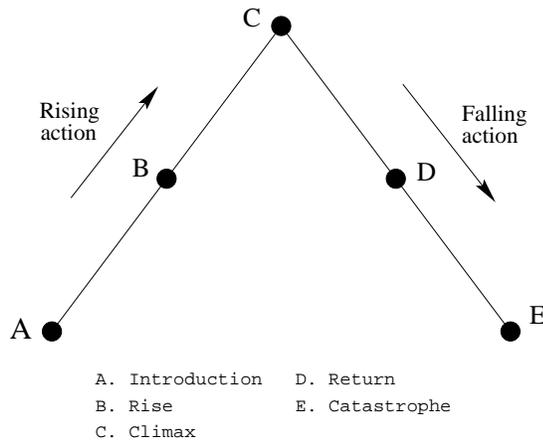


Figure 1: Freytag triangle

Discussion of the model

In developing this model of story-generation, I have made a very conscious attempt to be reductionist. The isolation of essential aspects of storiness has been a primary goal. The reader-based approach evolved partly from a sense that this was something conspicuously missing from previous story-generation systems, partly from an intuitive feeling that this model represented an important part of why stories work for *me*, but mostly because it seemed to provide a mechanism whereby storiness *could* be encapsulated simply and generally.

In essence, the goal of this work will be to examine how much of the attributes we ascribe to stories can be accounted for with such a simple and general model. How far can this get us towards a more fundamental understanding of stories as artefacts? Of course, I'm scarcely claiming that this model attempts to address anything more than the most rudimentary structural aspects—so apologies are given to those for whom the term 'storiness' seems arrogantly greedy. So much of the richness of a story comes from the use of natural language, imagery, mood, and this model doesn't even begin to address those challenges.

But I am claiming that the simple mechanisms provided by this model capture something important and real about why a class of stories work so well and so often. After taking so much time to argue for storiness as a function of a story and its *individual* reader, I'm now proceeding to claim that this model captures generality too. The model divides in the following way:

- Sensitivity to individual readers is achieved since the entire complex of expectations derived during the course of the generation (or the *telling*, if you will) of a story is particular to a specific reader. They are *his* expectations, based on his background of assumptions and beliefs. Such expectations feed into the derivation of questions too, so the *pattern* of questions is also particular to a specific reader.
- Generality of generation is captured since the *mechanisms* by which questions are derived from expectations are invariant across different readers, and—perhaps more importantly—the abstract storiness heuristics which guide generation based on the patterns of expectations and questions present are also considered to be invariant across different readers.

The model claims, in essence, that the response of a reader to a story is idiosyncratic, but that there are general, abstract preferences for such responses which encapsulate important and real aspects of what makes a story work.

What are the weaknesses of the model? The most obvious is its reliance on the heuristic search of what is likely to be a considerable search-space. The model at the moment proposes no story-based constraints on the *generation* of the search-space. Since the operators which are used to generate the search-space of possible story segments are so promiscuous, the search-space will be very large. This creates obvious problems:

- The ability to use look-ahead within generation is reduced as the search-space grows.
- With a knowledge-base of any reasonable size, the size of even the first branch of the search-space is considerable. It is quite plausible that enumeration of even this first branch will be computationally expensive.

Both of these problems argue for some restriction in the generation of the search-space itself, and this may be unavoidable. My intention is to avoid taking this route for as long as possible, though, at least until I have a better feeling for how the search-space could be constrained in a principled way—meaning one which is consistent with the reader-based model of generation—rather than a purely expedient one.

Current state of development of the model

Implementation of the model described in this paper has begun, but is at the time of writing in its early stages.

As with any knowledge-rich AI system, the engineering of appropriate databases of world-knowledge is expected to be both difficult and crucial. Construction of a database of world-knowledge by reverse-engineering a sample of Brothers Grimm fairy-tales is planned.

This might seem to beg the question: if one engineers a knowledge-base *from* stories, isn't the generation of stories inevitable, and therefore uninteresting? Not so. Though such a knowledge-base would come from stories, it would not itself contain storiness (except as some very distant potential). The knowledge it contained would be structurable

in vastly many ways which were clearly non-stories. The potential for the generation of a Grimm-like story would exist within the search-space like a needle in a haystack. And the ability of the model to prefer Grimm-like stories, even from a knowledge-base derived from Grimm-like stories, would be a considerable feat—and would reveal a great deal about the construction of such stories.

It is hoped that it will be possible to examine the generation of stories from knowledge-bases without even the distant memory of storiness. Availability of suitable pre-existing knowledge-bases will largely determine how much this is pursued.

Generation of surface-text representations of stories is not considered to be an important part of the work-in-progress. Every effort will be made to make use of existing natural-language generation tools, though, so that eventual formal evaluation of the model can benefit from a more reader-friendly story-representation.

Conclusion

This paper has presented a model of automatic story-generation based on an intuitive modelling of the responses of an imagined reader to a story. The model was placed in the context of existing work, then the approach taken was motivated. Finally, a description of the model itself was provided, and its strengths and weaknesses were discussed.

It seems remarkable how little reader-response has been addressed in previous story-generation work, and also seems crucially important that it should be an important part of any future story-generation models which address the story itself as an *artefact*, rather than concentrating wholly on the cognitive aspects of the human authorial process. Though, of course, a reader-response theory might fit just as well into a cognitive account of human authoring: an author is quite plainly his *own* reader, and his own response to unexpected or serendipitous imaginings is no less interesting or relevant to the generation of the story than that of some distant reader.

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