



ELSEVIER

Contents lists available at ScienceDirect

Futures

journal homepage: [www.elsevier.com/locate/futures](http://www.elsevier.com/locate/futures)

# The New Narrative: Applying narratology to the shaping of futures outputs



Paul Graham Raven<sup>a,b,\*</sup>, Shirin Elahi<sup>c</sup>

<sup>a</sup> Pennine Water Group/Sheffield Urban Institute, University of Sheffield, UK

<sup>b</sup> Institute for Atemporal Studies, UK

<sup>c</sup> Director of Scenarios and Innovation, Normann Partners, UK/Sweden

## ARTICLE INFO

### Article history:

Received 16 September 2015

Accepted 22 September 2015

Available online 9 October 2015

### Keywords:

Futures

Design

Scenarios

Narrative theory

Subjectivity

Science fiction

## ABSTRACT

Both scenario development and design practices incorporate elements of storytelling, but this use remains undertheorised. This paper will draw upon literary theory, film theory and science fiction criticism to develop an analytical model of narrative structure and rhetorics which speaks to the concerns of scenario developers and designers when engaged in shaping the final outputs or deliverables of a futures project.

After highlighting the differing role of *telos* in art and futures and defining the metacategory of “narratives of futurity”, this paper then defines the terms “story”, “narrative”, “narrator” and “world” in the literary context. It then shows how those concepts map onto futures practice, before going into detail regarding the variety of narrative strategies available across a range of different forms and media, and the qualitative effects that they can reproduce in audiences. There follows the construction of a  $2 \times 2$  matrix based on the critical concepts of *narrative mode* and *narrative logic*, within which narratives of futurity might be usefully catalogued and compared, and from which certain broad conclusions may be reached as regards the relation between choice of medium and rhetorical effect. The implications of this analysis are explored in detail.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction: futures, fiction and telos

Throughout history, people have used myths, symbols and metaphors to find shared meaning and connect with each other. Many of these stories have been retold, refined, reworked and reused over centuries, always changing with the times, but always talking to the common human experience.

Storytelling lies at the heart of scenario and design practices; while the media used may vary, and the styles even more so, both disciplines are engaged in the creation, analysis and critique of narratives—as shall be demonstrated. While no small amount of literature has been generated on the matter of the general reflexivity of futures studies as an academic discipline (see e.g. [van der Heijden, 1996](#); [Ramírez et al., 2010](#); [Shell, 2008b](#)), little or no literature exists which applies the the strategies and logics of narrative as understood by writers, cineastes and cultural scholars to the methods deployed by futures scholars and practitioners in the creation of their final outputs (One significant exception would be the work of [Schroeder \(2011\)](#), but it comes from a more instrumental angle).

\* Corresponding author.

E-mail address: [paul@paulgrahamraven.com](mailto:paul@paulgrahamraven.com) (P.G. Raven).

This paper begins addressing this shortfall by providing broad answers to the following three questions:

- What is the relationship in literary theory between stories, narratives, narrators and worlds, and how do these concepts map onto futures scenarios and designs?
- How might different narrative voices and points of view change the way in which an audience relates and ascribes meaning to a story?
- How do different media, narrative modalities and narrative logics change the rhetorical framing of a narrative of futurity?

The answers to these questions are not as distinct from one another as the list above might suggest. Art, and the methods of art, are intrinsically subjective, and the rules can be broken in art's own name. But the *telos* – the purposefulness or intent – of an art-work differs from that of a scenario suite or design project, in that the *telos* of a work of art is largely decided by the artist themselves, while the futurist is most often provided with the *telos* of the project by the client, whether directly (e.g. through a clear project brief) or indirectly (e.g. in the form of interests or questions that emerge through workshopping).

This is more important than it may initially appear, because where the artist may bend and break the rules just to see what happens, the futurist is obliged to shape their final deliverable(s) to the *telos* they are given. The artist can choose whether to evangelise or play Cassandra, whether to persuade or dissuade—but the futurist often has those choices made for them. Given that narrative and rhetoric are intimately related, the practising futurist needs to understand how certain narratological strategies – which are often closely entangled with choices of medium – affect their final outputs.

There is a necessary distinction to be made between *form* and *content* in futures practice. The *content* is the research data that informs the scenario or design, as filtered through and shaped by the research questions or analytical focus applied to it; the *form*, meanwhile, is the final output (or outputs), the narrative delivery system through which that data is presented to the audience. To frame those categories in a more practical setting, then, the content might be a collection of lists, matrices and mind-maps collated during a workshop with clients, while the form might be a set of pen-portrait summaries of some of the possible futures created by that process. Equally, the form might be a set of physical prototypes, a series of photos, images or renders, a short story, a video or film – or there might be multiple forms. One set of data may be analysed and presented in many different ways.

This paper is very specifically concerned with the role of narrative strategies and modes in the shaping of *final form*—the client- or audience-facing outputs that must meet the project brief. As such, the specific *telos* or focus of any given futures project is effectively irrelevant in the context of this analysis; the intention is not to tell practitioners what is right or wrong, but to enable them to decide for themselves which strategies are most likely to achieve their aims.

## 2. Method: a structural analysis of “narratives of futurity”

This paper is predominantly theoretical in approach, in that it gathers established ideas from literary theory, narratology, film theory and science fiction criticism, and attempts to apply them in a systematic fashion to the process of creating a final output from a futures project. These theories are considered to be basic components of the operational knowledge of fiction writers and film-makers, but appear to have made few inroads into the realm of futures scholarship and practice—perhaps because, while there is clearly a relationship between the narrative arts practised as art and the narrative arts practised as futures research tools, the exact nature of that relationship remains unclear. This paper attempts to both highlight and address that lack of clarity.

This approach relies on the conceptual metacategory of “narratives of futurity”, and so it is important to clarify the distinction between “narratives of futurity” and “futures”. Simply stated, the latter is a subset of the former, but there are some semantic issues to raise first.

As a catch-all term for the outputs of foresight practices – be they designs, prototypes, scenario sketches, videos, growth forecast plots – “futures” is succinct but problematic: it conflates the sign with the signified. The “futures” thus produced are not actual futures, but *subjective depictions of possibilities yet to be realised*; no matter how strongly backed with valid data, they are nonetheless speculations, extrapolations, imaginative works. They are not portrayals of “The Future”—firstly because there is no canonical definitive future to be portrayed, and secondly because (as will be discussed) all narratives are inherently partial, in both senses of that term. “Futures” are *fictions*—albeit fictions told for a different *telos* to that of the average fiction writer.

“Futurity”, on the other hand, describes the effectively infinite range of possibilities represented by the forward continuation of temporality; if “futures” represent a large yet finite range of possibilities from which we might select the most favourable, “futurity” captures the possibility of the many variations or blendings to be found between (or even behind or beneath) the “futures” we can imagine easily. Or, to put it another way: to speak of “futures” is to admit the ghost of determinism to a temporal feast which, like the universe in which it takes place, is in fact stochastic; “futures” are implicitly normative, while “futurity” is illustrative. Nonetheless, “futures” is the accepted term of art in the foresight community, which is a strong argument in favour of its use. The argument for subordinating “futures” in the “narratives of futurity” metacategory, however, hinges on the way in which it reveals that “futures” are *not a special or unique type of text with regard to their aims and effects*.

As argued above, “futures” are speculative depictions of possibilities yet to be realised, as are “designs” (another problematically loose category); in this, they belong to a broader category of works that includes product prototypes,

political manifestos, investment portfolio growth forecasts, nation-state (or corporate) budget plans, technology brand ad spots, science fiction stories, science fiction movies, computerised predictive system-models, New Year's resolutions, and many other narrative forms. While they may differ wildly as regards their medium, their reach, and their telos, all of these forms involve *speculative and subjective depictions of possibilities yet to be realised*; as such, labelling this metacategory as “narratives of futurity” avoids further diluting the (already vague) label “futures”, while simultaneously positioning “futures” among a spectrum of other narrative forms which use similar techniques and strategies to a variety of ends.

This dethroning of futures is important, not least because allows for the introduction of entire realms of narrative scholarship to a discipline which has heretofore largely ignored it, despite making constant use of its tools. But it also highlights the issue of telos, as raised earlier: viewed from the abstract level of the “narratives of futurity” metacategory, it becomes clear that the vital distinctions between a work of design fiction and an ad-spot for a new model of smartphone, say, or between a scenario and a science fiction novel, lie not in *how they are made*, but in *what they are meant to achieve*. It could be argued that the central aim of all narratives is to persuade; the motives for that persuasion, meanwhile – and hence the specific strategies or techniques deployed to that end – are as manifold as the clients who commission them and the creators who make them. It may be disquieting for futures practitioners to find themselves placed into the same box as politicians and ad-men; such disquiet is, however, long overdue. If there is a distinction to be made, then it is in the telos; a knife might be used to carve, or it might be used to kill, but the choice is not the knife's to make.

Philosophy aside, however, subordinating both “futures” and “designs” to “narratives of futurity” first and foremost opens up the possibility of applying narrative theory to the production of futures outputs. But first it is necessary to unpack the notion of narrative itself, and then make a case for design as a narrative form.

### 3. The tale and the telling: what is (a) narrative, anyway?

*Research question: “What is the relationship in literary theory between stories, narratives, narrators and worlds, and how do these concepts map onto scenarios and designs?”*

#### 3.1. World, story and narrative

The first and most vital distinction to be made is that between *story* (or plot) and *narrative*. The simple way to do so would be to say that “young love, frustrated by family politics, ends in tragedy” is an archetypal *story*, and that “Romeo & Juliet” is a specific and well-known *narrative* (or account) of that story. The distinction becomes clearer if we fall back to the more precise term *plot* instead of story: the *plot* (which is etymologically descended from the concepts of the plan or outline) is a *sequence of events in time and space*, while a narrative is *an account of some or all of those events from one (or more) points of view*. Or, to use a simile: the plot is a route-map, but the narrative is the journey.

Story (or plot) is hence archetypal and universal, to a lesser or greater extent. Consider how Greek and Roman mythologies still haunt even our most contemporary literatures and political discourses: stories are the falsehood that tells a greater truth, a mirror in which we can recognise ourselves individually and collectively. We retell these stories because they are still relevant; the backdrops, scenery, props and costumes are changeable “furnishings” through which we can either draw a story closer to the *Zeitgeist* we recognise, or displace it safely away – whether into the future, the past, or another world entirely (Consider, for example, the number of Shakespearian plays being performed using props and costumes drawn from historical periods other than the one in which Shakespeare set his original scripts).

This illustrates the phenomenon whereby a story may “work” in many different contexts (or story-worlds), even as the specific context shapes the particulars of the way in which that specific iteration of the story plays out. So, to return to the simile: if the story is the route-map and the narrative is the journey, then the *story-world* is that territory of which the map is a necessarily incomplete facsimile. Or, more simply: a narrative is one possible subjective account and interpretation of a sequence of events (story) in a specific time and space (story-world).

It should now be clear how the basic structure of narrative theory from literature and cinema maps onto the work-flows of scenario developers and designers, as illustrated in [Table 1](#): scenario data is collected together to depict one or more futures (a story-world); research questions and/or analytical approaches provide a route-map through that world of data (the plot or story); a final output form is chosen in order to present (or rather narrate) the story for maximum desired impact.

Note that this model holds just as well for more quantitative futures work. Instead of stories or speculative designs, such studies would use tables, graphs and projections as their output forms—and for exactly the same reason, namely that those forms are best suited to narrate the story at hand in a manner that will gain the sympathies of the target audience. Referring

**Table 1**  
Mapping concepts from literature and cinema to futures practice

Literature/Cinema	Scenarios/Design
World (story-world)	Data, trends, extrapolations
Story (plot)	Research questions, analysis
Narrative	Output forms

back to Section 1, the light-grey rows in the table above represent the content-creation stage, and the darker grey row concerns the creation of the final form. It should also be noted that these are conceptual workflows only; in both futures work and the writing of fiction, there is often a great deal of iteration and repetition, and movements back and forth between the stages.

### 3.2. *The subjectivity of narrative*

As pointed out above, a narrative is an account of the events of the plot. However, there is no narrative without a narrator—without the entity whose account of events it represents. There are many different types of narrative, as will be explored more thoroughly in the following section, but for now the important point is that *every narrative is a function of the subjectivity of the narrator*. At the most objective level, this affects which parts of the story are told (and in how much detail), and which are not: a narrator cannot narrate an event which they did not personally witness or otherwise hear about, for instance.

But the narrator will also (in most cases) have their own opinions, attitudes and worldviews, which is where the intrinsic subjectivity of narrative lies: the narrative is their account of the story's events, but it is a *partial* account, in both senses of the term—partial as in incomplete, and partial as in the opposite of impartial. The narrative and its narrator are inseparable—even, if not especially, when the narrator appears to be entirely neutral and objective (see following section). The Japanese classic *Rashomon* is the canonical cinematic exploitation of this phenomenon, wherein the four main characters all tell a very different tale describing how a samurai was murdered. But by way of a simpler and better-known example, the song “Summer Nights” from the movie-musical *Grease* narrates the events of the previous summer from Sandy and Danny's perspectives alternately; while they experienced the same events, their interpretation of them clearly differs considerably.

Given the above, the consequential points are that (a) a story's meaning or import may shift when recounted by a different narrator, or by multiple narrators, (b) that a narrative may be incomplete or inaccurate, (c) that the narrator may not be aware of said incompleteness or inaccuracy, and (d) narrators, being human beings (or at least being fictional recreations of human beings) tend to view the world through their own individualised perspectives and interests, coloured – or framed – by blindspots and implicit assumptions that shape these views. As such, the choice of narrator and the choice of the narrative voice are non-trivial with regards to the question of creating a final output that meets the *telos* of the project.

### 3.3. *The story is not the world*

If a story is a sequence of events in time and space, then the story-world (hereafter referred to as “world”) is the contextual time-and-space in which that sequence of events occurs. As such, in most circumstances the world is much larger and more complex than the story, but elements of and events in this wider world may well influence and shape the plot, which makes the distinction unavoidably fuzzy. This is most easily understood by reference to “realist” or “mainstream” literature, in which the story-world is largely assumed to be identical to the one with which the reader is already familiar. For instance, the novel *Pride & Prejudice* foregrounded the fashions and mores of the era, so as to explicitly set it in a specific time, but the plot also draws on unstated assumptions about the way that world was affecting the sorts of people with which the novel is concerned. The motivations and obsessions of the lead characters can seem quaint and inscrutable to modern readers, but to a reader of Austen's own milieu, it would have been a given that competition between unmarried women of the middle classes was a result of the recently-ended Napoleonic Wars having decimated the stock of eligible bachelors in Britain.

A similar situation pertains to narratives of futurity, in that they are set in a wider context where unfamiliar and sometimes counter-intuitive factors may be at work in the story-world; this is one of the sources of what the science fiction critic Darko Suvin called “cognitive estrangement”, which is the feeling one gets from a science fictional text which indicates some sort of conceptual or temporal break with the reader's “home” reality (Suvin, 1972). Some of these factors of futurity appear explicitly in the text, whether as maguffins or plot-devices, but many more – particularly factors stemming from broad yet subtle differences in social structure, and particularly frequently in more recent science fictions – may only be implied in passing through the observations of one or more narrators, if at all. The completeness of this world is never revealed (perhaps not even to the author), much as the completeness of reality is never revealed to any one inhabitant thereof; there's simply too much of it to fit in the finite experiential frame of a single novel (or lifetime). But in both cases – whether a story takes place the “real” world or an imagined one – the expectations of those worlds necessarily surround and inform the story.

Ernest Hemingway summed up this relationship between world, story and narrative thusly:

“If a writer of prose knows enough of what he is writing about he may omit things that he knows and the reader, if the writer is writing truly enough, will have a feeling of those things as strongly as though the writer had stated them. The dignity of movement of an ice-berg is due to only one-eighth of it being above water. A writer who omits things because he does not know them only makes hollow places in his writing.” (Hemingway, 1999)

The metaphor of Hemingway's iceberg might be considered a literary equivalent to the more pithy (but admittedly less specific) business rubric “garbage in, garbage out”; in terms of creating futures outputs, it means that while the choices and

strategies discussed herein can play an important role in shaping a narrative for optimum effect, they can never compensate for bad data or weak research.

### 3.4. *A solid story: the case for design as a narrative form*

So what, then, of design—does it also fit into the metacategory of “narratives of futurity”? To those readers outside the arts and humanities, the assumption that each and every artefact of human creation may be “read” as a “text” may seem something of a stretch, especially if we add design practices to this category. But while defending the epistemological assumptions of the humanities and social sciences is clearly beyond the remit of this (or indeed any other) paper, a conjectural case for design-as-text is relatively easily assembled.

In fact, the fuzziness of the category “design” works in favour of such an attempt. To take a very broad swipe at the question, a design inevitably precedes the product or service; as such, it is inescapably a subjective depiction of possibilities not yet realised, a narrative of futurity. And while designers often make physical prototypes, they may also use written text, images, videos, computer renderings and other media to capture their ideas; as with “futures”, the main distinction between “design” and “art” as created in one or more of these media is the telos that motivates the work.

We can make a more solid argument for design as a narrative form by interrogating designers’ own definitions of “design”. [Ralph & Wand \(2009\)](#) formulated the following definition for “design” as a noun:

“...a specification of an object, manifested by an agent, intended to accomplish goals, in a particular environment, using a set of primitive components, satisfying a set of requirements, subject to constraints.”

The “object” which the agent “manifests” might be a physical prototype, but it might alternatively be a prose specification document, or a 3d image render; even when the design is a physical object, it may well be “framed” by images or text which convey supplementary information about the assumptions made by the designer. But in any such case, the definition above suggests that a design relates to story-world and plot in much the same way as a more obviously “narrative” form.

In a design, the plot is analogous to the goals which the design is intended to accomplish: a series of events in space-time, no matter how brief (Admittedly, “householder turns on lights” is not much of a plot in dramatic terms, but it’s still a plot, and it still involves a motivated character attempting to achieve a certain goal or goals). Meanwhile the story-world manifests in the form of the “particular environment” and “constraints” mentioned in [Ralph & Wand’s \(2009\)](#) definition above; much as a story set in a world with half-strength gravity would constrain certain character actions, a world with half-strength gravity would also presumably have a serious influence on the design parameters of certain objects in that world.

As such, a design situates the plot (desired sequence of action) into the story-world (context, possibility and constraints) in a manner which, in the vast majority of cases, assumes a human purpose or need; even a system or object designed to do some thankless task in some remote location is meeting a human desire to achieve that end without a human having to go there and do it. Different schools of design conceive of the end-user in different ways: for example, use-centred design focusses on the desired effects to be produced, while user-centred design focusses foremost upon the user themselves. Perhaps here we find the closest analogies to the various voices of narrative: design philosophies, one might argue, represent different perspectives upon the relationship between the user, the objects with which they interact, and the world in which they do so.

Analogies aside, it seems clear that a design contains a lot of the same types of information as other forms which we might more readily classify as narratives—and, crucially for the argument advanced herein, a design captures both human subjectivity and agency in the user-world as imagined by the designer. Furthermore, a design is subject to the same “garbage in, garbage out” paradigm as a scenario suite or science fiction novel: if the context (story-world) is insufficiently well researched, if the goals to be achieved (the plot) are weakly formulated or unrealistic for the context, or if the user (the focal character) has been poorly imagined, the design (the narrative) will fail to persuade.

It can be hard to make the imaginative leap and assume that design can tell stories, even though the way we talk about historical artefacts – which are all, in essence, designed objects – frequently frames them as “having a story to tell” about the people who used them and the world they were made for. But equally, it is clear that design narrates in a different, less direct way than, say, a prose story—not least because the user/character may not be explicitly present, which makes identifying with them a less instinctive process. As such, and with the acknowledgement that this paper is necessarily delineating under-theorised spaces with the briefest of strokes before moving on, we might turn to irascible science fiction author and design critic Bruce Sterling for a way to capture both design’s narrative nature and its difference to other narrative forms. In an interview ([Bosch, 2012](#)) he described design fiction as “not a kind of fiction [but] a kind of design. It tells worlds rather than stories.” Design fiction (a subdivision or extension of the “critical design” paradigm) is distinct from “proper” design primarily for reasons of telos rather than differences in technique, in the same way that telos is the distinction between a scenario and an out-and-out science fiction story. But while design fiction “tells worlds rather than stories”, it (and hence all design) still *tells*—it still subjectively depicts an encounter between a character with agency and an object in a contextual world; it still *narrates*.

Philosophy aside, however, subordinating both “futures” and “designs” to “narratives of futurity” first and foremost opens up the possibility of applying narrative theory to the production of futures outputs—and it is to this more practical end that this paper now turns. It is hoped that the results to follow will vindicate the conjecture above.

#### 4. The players and the playwright: narrative time, voice and point-of-view

*Research question: “How might different narrative voices and points of view change the way in which an audience relates and ascribes meaning to a story?”*

We turn next to a more thorough look at the variety of narratological strategies available in text, video and other media.

The written word arguably affords the greatest freedom of choice with regards to narratological strategies, and they are well understood in the literary disciplines. Examining them fully is beyond the scope of this paper, but it is possible summarise the central issues of narrative time (or temporality), voice and point-of-view—always with the caveat that, as is often the way with matters literary, the categories overlap and interact somewhat. For a more thorough treatment of this tangled topic, see e.g. [Abbott \(2008\)](#) and [Herman \(2007\)](#), upon which the following is based.

##### 4.1. Narrative time, or temporality

Put simply, narrative time emerges from the *tense* in which the narrative is written: past, present, or future. While they are hard to quantify, the effects of the chosen tense are not just aesthetic but rhetorical. For example, a story told in the past tense frames the narrative as being somehow historical, in that the events are being looked back upon by the narrator. The present tense, meanwhile, enhances a sense of immediacy, the feeling that events are hanging in the balance; hence its popularity in thriller and adventure genres, science fiction included. The future tense is rarely used in modern fiction, as its prophetic or evangelistic tone tends to trigger disbelief and scepticism (though this phenomenon is sometimes exploited for literary purposes). It is perhaps no surprise, then, that the future tense is most often encountered in manifestoes, policy documents and advertising copy, all of which aim to “sell” their narratives of futurity into actuality through persuasion; the ubiquity of the future tense in these forms of media may also explain the increasingly sceptical response to such among Anglophone audiences.

##### 4.2. Narrative point-of-view, or person

The point-of-view or “person” of a narrative determines the relation of the narrator to the story. In a first-person narrative, the narrator will refer to themselves as “I” (or, more rarely, “we”, for collective and/or otherwise plural narrators), and will narrate predominantly from their own embodied position in relation to other characters and events in the story. The first-person narrator is frequently, but by no means always, the protagonist; they will often give an account of their own internal thoughts and emotions, but have no direct access to the thoughts and emotions of others.

The second-person narrative, in which the narrator refers to themselves as “you” (thus appearing to conflate themselves with the reader), is rare in prose fiction, with notable exceptions—[Charles Stross’s \*Halting State\* \(2007\)](#) and [Rule 34 \(2011\)](#) make great use of the second-person voice, for example. The second-person is most commonly found in choose-your-own adventure narratives and certain types of classic video game, and it is this similarity that Stross exploits so well, using it to underscore the blurring of the distinctions between real and virtual realities that his characters experience. However, the second-person is still widely considered to be disorienting for many readers, though the generational influence of video games which use a second-person narrative framing may change that.

The third-person is arguably the most popular (or at least the most widely used) point-of-view in modern literature, perhaps because of its great versatility. In a third-person narrative, no one will be referred to as “I” or “you”, because the third-person narrator lacks agency: it is as if they are an invisible presence in the story, undetectable by the other characters, observing and reporting on all they see but never acting themselves.<sup>1</sup>

However, there are a variety of different ways in which a third-person narrative may be written, which brings us to the matter of voice.

##### 4.3. Narrative voice

Narrative voice is partly a function of narrative time and point-of-view, in that those choices limit the choice of voice (or vice versa). Put simply, narrative voice is the “style” in which the narrator narrates. A first-person narration might be delivered in the “character voice”, which is to say it would be written as if the protagonist were recounting (in the past-tense) or reporting (in the present-tense) their experience of the action directly for the reader, or it might be in the “stream of consciousness” voice beloved of the literary modernists (see e.g. [Woolf, 2012](#); [Joyce, 2004](#)), where the narrative is close to the protagonist’s internal monologue or thought-processes. First-person narration using the character voice opens up further possibilities for playing with subjectivity, whether through the “unreliable narrator”, who dissembles or obscures elements of their account as delivered to the reader (e.g. [Wolfe, 1994](#)), or the “naive narrator” common to satirical fictions, whose innocence and/or ignorance highlights the injustices and inanities of the story-world—see e.g. the eponymous “hero” of [Gulliver’s Travels \(Swift, 2005\)](#).

<sup>1</sup> Note also that, just because the third person narrator is not (usually) a character with agency of its own, a third person narrator is not neutral or objective, as they retain the curatorial role of selecting which scenes are seen by the audience; this is the ghost of the author haunting the text, and is sometimes referred to as “the implicit narrator”.

Second-person narratives may be written in the character voice or the stream-of-consciousness voice, but the second-person struggles to portray narrator unreliability due to the way in which it drags the reader into the action as a seeming participant.

Third-person voices are most commonly classified with reference to two spectra: [objective/subjective] and [omniscient/limited]. The *subjective* third-person voice will describe the thoughts and feelings of some or all of the characters under observation, while the *objective* third-person will only describe their externally observable actions and behaviours. Compromises exist between these two extreme positions, wherein the narration may be more or less subjective (rather than entirely so or not at all), and the intensity of subjectivity might shift from scene to scene, allowing the author to “zoom in” on character interiority at moments of high drama or emotion, or “zoom out” to a more objective account for more descriptive purposes.

The *omniscient* third-person narrator, meanwhile, has a god-like knowledge of the story, the world, and all of the characters, allowing them to recount or report a scene with reference to events that happened elsewhere or that have not happened yet, and (if subjective as well as omniscient) report on the inner thoughts and feelings of any character. The *limited* third-person narrator's access to interiority is restricted to that of the “focal” character of their narrative (who is often but not always the protagonist). This dualism is perhaps best described by saying that the omniscient third-person narrator, like an invisible deity, can observe any event in the story-world from any position or perspective, while the limited third-person narrator follows one particular character very closely, like a camera-drone programmed to keep them in shot at all times.

It bears noting that any given work of prose fiction, particularly longer forms like the novel, may contain multiple narratives with different narrators, and those narratives may partake of a variety of different modes. Enumerating specific examples is beyond the scope of this paper, and further complicated by the lack of a modern “canon” with which a solid majority of readers might be assumed to be familiar. As with all analytical frameworks, the best way to get a feel for the modes described above is to identify them in action within works with which one is already familiar, and to consider how the choice of mode affects the reader's relationship to the narrative and its narrator(s), as discussed in Section 6.3 below.

For instance, it should go without saying that a subjective third-person mode is more likely to leave the reader feeling greater identification with the character(s), while an objective third-person mode would feel a bit less intimate; thus one might use a subjective limited mode in order to “humanise” a character whose motivations are unclear in terms of their actions, and an objective omniscient mode to create a sense of distance from (and perhaps judgement of) a character or group with whom the reader is not supposed to empathise. Such techniques are not foolproof, however, and rely on varying degrees of reader sophistication to achieve their best effects; see Section 6 a regarding “reading protocols”.

#### 4.4. *I am a camera: narrative strategies in the visual arts*

A similar selection of narrative voices are available to filmmakers, game developers and designers working with images or prototypes; in these more visual forms, the narrative voice is most easily understood in terms of the camera acting as the narrator's “eye”. So a first-person visual narrative shows the scene as the focal character would be seeing it through their own eyes (think here of the “first-person shooter” subgenre of video games), but a third-person narrative – which may or may not limit itself to following only one character closely, or take a more omniscient point-of-view – can “see” from wherever the director chooses to position the camera.

While they have many advantages over the written word – immediacy and spectacle, not least among them; see Section 5 – visual and cinematic narratives are disadvantaged by comparison to the written word in one crucial respect: they struggle to portray the inner thoughts and feelings of characters in believable ways. Techniques such as internal monologue voice-overs have been used for this purpose (and are a commonplace in advertising), but the rarity of contemporary examples suggests that this method simply does not make for great cinema; however, much as with the second-person point-of-view described above, it may be that the use of this technique in video games and other media will (re)normalise in the context of generational media preferences

Still images and designs are also narrative forms, but are further limited by comparison to cinema due to their lacking a temporal dimension: they represent frozen moments from a story, narrations a split second in length. While images and prototypes can be and frequently are accompanied by explanatory or framing texts, audio or video, and will generally be further framed by the display context in which they are meant to be viewed, it is important to note that the still image or prototype design is very easily separated from these narrative contextualisations, and – in the internet age – susceptible to near-infinite reproduction, redistribution, alteration and reframing; this is far from a new phenomenon, to be clear (see for example Benjamin, 2008; Berger, 2008), but it poses particular challenges for futurists in the internet age, as shall be discussed.

## 5. The rhetorics of futurity: narrative modes and logics

*Research question: “How do different media, narrative modalities and narrative logics change the rhetorical framing of a narrative of futurity?”*

This section recounts a framework already described in Raven (2015), which was written to introduce the rhetorics of futures to a science fiction studies audience; this necessarily brief account has hence been tweaked with the aim of achieving a flow of ideas in the other direction.

Moving from an examination of narratological strategies to a yet more abstracted level of analysis, we can consider the interaction of *narrative mode* with *narrative logic*, represented by a  $2 \times 2$  matrix (see Fig. 1 that captures two entangled dichotomies, namely the *modal* [diegetic/mimetic] and the *logical* [dramatic/spectacular]; the matrix can be used to map the rhetorical structure of different types of futures. The diegetic mode privileges the foreground (and/or the narrator), especially with regard to the independent agency of technological novums, while the mimetic mode privileges the background (or the story-world), and insists that foreground novums be situated coherently in the context of the story-world. Meanwhile the spectacular logic privileges surface, spectacle and the sublime (either the natural or – particularly in the case of sf and futures work – the technological sublime), and the dramatic logic privileges interiority, emotion, and relationships (whether between characters or – particularly in the cases of sf and futures work – between characters and technologies).

The horizontal *modal axis* is based on Plato's original poetic dichotomy (Plato, 2003), stretching from *diegesis* to *mimesis*. Plato's original distinction marked the difference between the two great literary forms of his era: the heroic or epic poem, in which a narrator recounts the story to the audience (diegesis), and the play, in which the events of the story are acted out by an ensemble cast (mimesis).

We can make a useful comparison with the narrative voices of cinema, as described above, and note that Platonic diegesis is rather like the first-person point-of-view, in that the narrator is giving us their own personal description of the events in question, while Platonic mimesis is more like a third-person point-of-view, where the audience are “in the room” with the action, but not (usually) active participants in such. Note that in diegesis, the narrator acts as a sort of “choke-point” for subjectivity: no fact or falsehood may reach the audience without first passing through the narrator's perceptions and opinions. The narrator's role in diegesis is essentially curatorial; they have agency not only in terms of being able to take action in the story themselves, but also in terms of *being able to select which elements of the story are “shown” to the audience*, and from which perspectives or positions. Remember that the narrator may well narrate the accounts of others on their behalf, and it is down to us whether we believe them to be reproducing those accounts faithfully; thus the diegetic narrator has the greatest capacity for being an unreliable or naïve narrator (see Section 4.3).

While Plato's definitions inform the use of the terms diegetic and mimetic as used in this paper, they are only a starting point. When looking specifically at narratives of futurity, the term “diegetic” relates more directly to the notion of the “diegetic prototype” (Kirby, 2009)—technological prototypes introduced into science fiction films in order to deliver a jolt of Suvin's cognitive estrangement, deployed visual cues to indicate that the time or place depicted is not the one in which the audience exists (and, increasingly, in order to prime audiences for future “real” products; Kirby refers to these deployments as “pre-product placements”, and cites the touchscreen interface designs from the movie *Minority Report* as a canonical example thereof). Bruce Sterling relates the diegetic prototype directly to design fiction, which he describes as “the deliberate use of diegetic prototypes to suspend disbelief about change” (Bosch, 2012); by introducing a cognitively-estranging object into the narrative frame, the audience are more or less reliably displaced into a story-world where the diegetic prototype is a real product; the story-world (the narrative background) is implied by the object (the narrative foreground).

Hence this paper defines the “diegetic mode” as a narrative strategy wherein the foreground (a speculative technology) is privileged over the background (a plausible story-world), and the “mimetic mode” as a narrative strategy wherein the background governs the foreground.

By way of illustration, one might say that the Golden Age sci-fi “gadget story” represents the diegetic mode, in that a new and usually disruptive technology is imposed on a lightly-sketched story-world, and plays a privileged, focal role in the

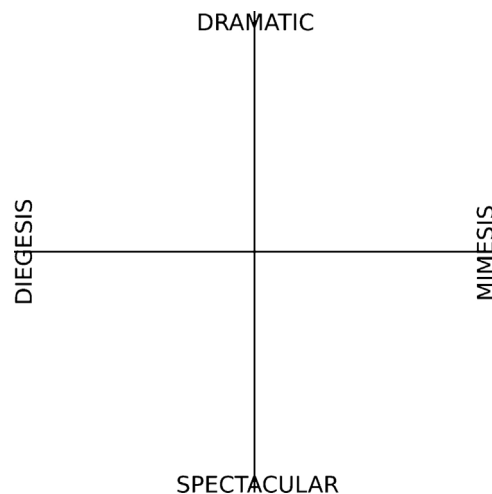


Fig. 1. Modality matrix for narratives of futurity.



narrative. Meanwhile the movie *Gattaca* is a more mimetic work, given that its central novum (eugenic population management) is implicit in every aspect of the story-world without it ever taking centre-stage at any one moment. Science fiction might be described as that branch of narrative form which routinely extends agency to non-human actors, such as technologies; as such, the diegetic mode is dominant when the agency of one or more technological actors is foregrounded, and supersedes that of the human characters, while the mimetic mode is dominant when the agency of technology is portrayed as both emerging from and being dependent upon its position in a complex network of human and non-human actors (For a more detailed discussion of this problematic as related to scenarios and science fiction prototyping, please see Raven, 2014).

The vertical *logical axis* is based on a dichotomy of narrative logics found in cinema and advertising scholarship (see Gurevitch (2009) for a contemporary deployment). It stretches between the spectacular logic (of which the Michael Bay summer blockbuster, packed with intense CGI action sequences but lacking anything more than a vestige of interiority, would be the canonical science fictional exemplar) and the narrative or dramatic logic (which focuses less on explosions and car chases and more on intimate interactions between characters, or – in the case of sf, scenarios and speculative design – between characters and their technologies).

The resulting matrix, allows for a comparative assessment of narratives on the basis of their form and style, and in terms of their rhetorical effect; this will be discussed more thoroughly in Section 6.3.

## 6. Discussion, and implications for design and scenarios practice

### 6.1. Flagging up futurity: the science fictional “reading protocol”

As argued above, scenarios and speculative designs can be collected alongside science fiction narratives under the broader category of “narratives of futurity”, and this paper contends that the relationship is close enough that many of the metaphenomena which attend science fiction media also attend futures outputs—which is to say that, even when a scenario or design does not draw on established tropes or ideas from pre-existing science fiction media, the framing of futurity is itself sufficient to displace such narratives into a “special” category, where distinct rules and heuristics apply. But the borders of this category are fuzzy and indistinct, as indeed are the borders of the science fiction “genre”.

Delany (2013) attempted to address the problematic of genre fuzziness with the introduction of the concept of the “reading protocol”. Rather than seeking to categorise a text through the identification of canonical tropes or styles, Delany suggests that one instead approaches the text through a readerly lens that interrogates said text with reference to the set of interpretive conventions that have come to form the science fictional discourse. The great advantage of Delany’s approach is that, by displacing “science-fictionality” from being located *within a text*, and relocating it *within the reading or interpretation of that text*, one is able to generate science fictional “readings” of texts which were not necessarily intended as such by their authors.

But there is a flipside, namely that texts intended as science fictions by their authors will have been written with the expectation that the reader will bring some or all of the established science fiction reading protocols to their reading of that text; as such, a reader *not* equipped with the correct protocol(s) may fail to parse the text as intended—a phenomenon surely encountered by any long-term science fiction reader who has attempted to “convert” a mainstream reader to an appreciation of the genre. So while the artist is not restrained by *telos*, as is the futurist, the science fiction writer or cineaste faces an analogous challenge in the form of the reading protocol, which a successful work must both draw upon and, ideally, add to or iterate.

The reading protocols of science fiction are sufficiently complex and heterogeneous that to catalogue them would be a Sisyphean task—though the thematic entries in the online version of the Science Fiction Encyclopedia (see [www.sf-encyclopedia.com](http://www.sf-encyclopedia.com)), and significant chunks of the website TV Tropes (see [www.tvtropes.org](http://www.tvtropes.org)), go some way to capturing the bigger and better known sub-protocols in an accessible form. This means that not only can one not rely on any given reader having internalised a suite of science fiction reading protocols, but that one cannot rely on two readers sharing exactly the same suite of protocols. As Delany insists, science fiction is a discourse in its own right, riddled with internal dissent and schisms; even (if not especially) among committed fans and experienced critics, consensus on whether a text “passes” as science fiction or not, and on what aspects of the text enable it to pass, is very rare.

The reading protocol presents a problem for futurists, because the *telos* of their work demands a certain sort of reading from the audience; for the novelist, the stakes of misjudging the audience’s reading protocols may result in a shrinking audience, but for the futurist, a misparsing of a project output may have consequences more profound and concrete. The simplest illustration of this problem might be a design image or short video which has, as described above, been detached from its original framing and context to float free through the semiotic soup of the internet. When encountered by an audience who have not been primed with the appropriate framing, or who have perhaps been primed with a different framing entirely – a concept design re-blogged as if it were an actual product, available for purchase, for instance – may apply inappropriate reading protocols and misinterpret the image or video accordingly.

We might describe this as the problem of the “missing frame”: Dunne & Raby (2013) point out that many speculative designs need to be labelled or framed appropriately, in order that they are not merely mistaken for some odd-ball artwork. But this raises the possibility of objects and images shorn of context, or recontextualised by another narrator. This is not a purely theoretical problem, either; for instance, the popular end of the transhumanist movement has a culture of reporting

on speculative designs as if they were actual products, whether through ignorance or wishful thinking, and the movement's ideologues – as Silicon valley habitués, already steeped in the rhetorics of science fiction and futures – are not shy about exploiting such a fertile, pre-primed audience. There is a real risk of developing a “cargo cult of futurity” when speculations and provocations are shorn from that which they were intended to signify; the risks are highest with designs which deliberately step into the fuzzy realm of the hoax.

The ghost of ethical practice lurks in the wings of the futures professions, and the exploitation and/or abuse of the reading protocol is a likely source of early problems in this field. Sterling (Bosch, 2012) has pointed out the potential for abusing the tools and techniques of design fiction, noting that there are ethical issues in designing non-existent “products”, because the only thing that separates such practice from outright hoaxing or fraud is the intent (or *telos*) to which it is put; Sterling uses the example of the magnetic cancer-cure bracelet as the “dark side” of design fiction, while arguing that design fiction itself “is not something that tries to convince you [that something that does not exist really does]” (ibid). This is where the missing frame problem rears its head: the early Superflux project ARK-INK, for instance, included mock-up images of disaster response handbooks and prototypes of the ARK Radio, a speculative post-disaster mesh-networked communications device; this resulted in a series of enquiries from members of the public interested in purchasing copies of the books or an ARK Radio, or wanting to join their local chapter of the fictional foundation and get involved. In speculating about possible solutions, the project generated an unfounded hope for actual solutions, albeit with the best of intentions; perhaps in this case, the implied distance between the project's story-world and the “real” world was insufficiently delineated.

However, it is the cognitive dissonance generated between the story-world of the design and the world in which the audience exists which enables design fiction to achieve the cognitive estrangement that gives it its rhetorical power. Finding and walking the thin-but-fuzzy line between “doing design fiction” and “deceiving people” is the great challenge the discipline faces as it moves further into the spotlight of contemporary practice. Sadly, there will always be those who decide to use these techniques for deceit or seduction—as in “flat-pack futures”, a technology advertisement sub-genre identified by Scott Smith as exploiting rhetorical devices which common to futures outputs (Smith, 2014). But while deliberate deceit is difficult to forestall, a more thorough understanding of narrative strategies and modes may go some way to forestalling accidental misparings.

## 6.2. *Who speaks to whom? Voice and point-of-view*

Section 4 above outlines the manifold possible narrative strategies available to the creators of fictional texts and films, and suggests that some strategies are structurally predisposed to produce certain rhetorical effects in the reader; unlike the science fictional reading protocols discussed in section 6a, however, these strategies and effects are broadly universal (at least in the context of Western/Anglophone media), and can be assumed to inhere in the majority of audiences who are literate in the medium in question. Furthermore, all references to “characters” apply equally well to institutional actors, e.g. “the government”, “the environmental lobby”, “the business sector”.

As mentioned previously, the choice of tense has a qualitative effect on the resulting narrative, but that effect is mediated by cultural expectation and experience, with the result that the classically prophetic future tense nowadays tends to provoke questioning and skepticism rather than belief—perhaps due to the ubiquity of the future tense in religious and political discourses, and in the rhetorics of marketing and advertisement. The choice of narrative voice and point-of-view also have qualitative effects, though the extent of those effects varies considerably between readers.

For futurists, the manipulation of sympathy is the main reason that narrative strategy matters. Much in the way that the reader needs the appropriate reading protocols to parse the futurity of a narrative in a way that meets its *telos*, the reader also needs to know who in the narrative they should trust or mistrust, who to root for, whose side to take; this is achieved in part through good story structure, but careful choices with regard to voice and point-of-view can reinforce the positioning of a character or characters in the moral universe of the story-world.

By way of example, the latest scenario vignettes from Shell (2008a) are written in a sort of “institutional present tense”; these futures are described in the abstract without reference to individual experiences, the majority of the named actors are institutional, and the challenges are depicted as (quite literally) a present condition within the narrative frame. The use of institutional characters might seem to exclude troublesome subjectivity from the narrative, as in the more traditional literary third-person voice described above, but the implicit narrator still haunts the text; no matter how much it (or any other individual or institution) attempts to efface its role as narrator, this is still Shell's (partial, subjective) account of the actions of other institutions in a story-world of its own imagining. As for the choice of tense, the present is perhaps more credible than the prophetic and predictive future tense used by soi-disant “futurists” such as Ray Kurzweil (see e.g. Kurzweil, 2005), and it also avoids the way in which the past tense frames the events described as a sort of historical *fait accompli*.

That *fait accompli* effect has its uses, however, as illustrated by *The Collapse of Western Civilisation* by the sociologists Oreskes & Conway (2014), whose rhetorical power comes from describing the ecological–economical collapse of the West from the perspective of a Chinese academic institution a few hundred years hence. This highlights another important implication of the past tense, whether the narrator is individual or institutional, which is that, in the words of the science fiction critic John Clute (2014), the past tense implies “that the teller survives the tale being told”. With respect to scenarios based on existential crises such as climate change, presenting them as genuine threats which are nonetheless survivable is a more hopeful framing than the ecological and/or economic dystopias so prevalent in the outputs of Hollywood—an

institution which has done more to shape laypeople's conceptions of the future than any thinktank or consultancy, with the possible exception of the Club of Rome.<sup>2</sup>

However, narrative strategies have different results in different contexts; for instance, first-person stream-of-consciousness and third-person subjective strategies, which reveal the inner thoughts of a character as well as their actions, may help a reader to empathise and identify with a “good” protagonist, but may also reveal an unpleasant side to a more complicated and morally ambiguous character. More generally, it can be said that the more subjective strategies (those which include an insight into character interiority) will elicit a stronger connection between the reader and a character thus portrayed, but the precise nature of that connection will depend on the moralities of both reader and character.

Sympathy and connection with characters is not always a desirable or useful effect, however, particularly in scenario outputs with a very instrumental *telos*; indeed, many situations can be imagined in which the narrator is only required to act as the camera-eye of a “walk-through” of an imagined future or location, and where subjectivity would come as unwanted baggage—particularly, for instance, in a situation where the purpose of the exercise was to provoke the subjective opinions of the audience with as little priming as possible. In such a situation, the more objective narrative strategies would be more suited to purpose. But it bears mentioning that many readers will nonetheless infer or project a complex subjectivity onto even the most cardboard-cut-out characters—which is to say that, while it is possible to make choices of strategy which will increase the *likelihood* of the desired reading, there is no “magic bullet” solution.

Presenting narrative strategy in very abstract terms, as this paper does, might indeed be considered to compound the problem. While narrative *strategies* are easily identified in a text by following the structural spoor described above, the actual implementation of them throughout a text is a matter of countless *tactical* choices, whether conscious or sub-conscious, on the part of the author—and despite all the “how to write fiction” guidebooks on the market, these tactics are too contextually bounded to be codified into anything but the vaguest of heuristics. All of which is to say that there is no short-cut to learning how to reliably achieve consistent narrative effects, only the trial and error learning curve which all aspiring writers go through. Surmounting the learning curve requires a great deal of writing, but also a great deal of reading, as the effects achieved by others are often the only precedent for the effects one seeks to produce, and both the reading and writing of a text are subjective processes of (re)presentation. As such, futurists seeking to master their control and grasp of narrative strategies and bend them more reliably toward the *telos* of the task must take on a training regime like that of any other writer of fictions; narratological theory is the closest it is possible to get to a set of prescriptive rules in this domain, and as such it seems a solid place to start.

### 6.3. Seduction and persuasion: the rhetorics of futurity

Section 5 above summarises an analytical framework for narratives of futurity, represented by a  $2 \times 2$  matrix (as illustrated by Fig. 1) that captures two entangled dichotomies, namely the modal [diegetic/mimetic] and the logical [dramatic/spectacular]; we will now address the implications of the relationships described therein.

In their discussion of the logical dichotomy, Bassett et al. (2013) state that “the narrative and spectacular logics of [science fiction cinema] operate very differently and can be said to variously find their force through persuasion or insistence, argument or presence, poetic imagination or visual feast”; broadly speaking, the spectacular logic *insists* through sheer visual overload, while the dramatic logic *persuades* through the representation of believable discourse and relationships, though it should be noted that almost all films partake of both logics to a greater or lesser extent.<sup>3</sup>

However, the difference in the *character* of coercion at work in the two logics is crucial to scenarioists and designers, again due to their being constrained by the *telos* of their task. For instance, if one's brief was to provoke debate about a prospective new technology through scenarios or speculative designs, one might choose to lean more toward the dramatic logic, where an emotional and intellectual engagement with the narrative is encouraged. However, if one chooses to do such work in a visual medium, one is saddled with the innate bias of that medium toward the spectacular logic; this is partly a structural outcome of the range of narrative strategies available in that medium, and partly due to audience expectations around science fictional video media (which, over the last three decades, has made a regrettable end-run toward a ubiquity of spectacle and a paucity of drama). Put simply, the challenge in this situation is to avoid unintentionally making something which ends up looking to the audience like an advert—another narrative form where spectacle and the rhetorics of insistence rather than persuasion are widespread if not ubiquitous.<sup>4</sup>

<sup>2</sup> Indeed, *Limits to Growth* illustrates the value of selecting the right narrative form for the audience you seek to persuade. The Club of Rome's famous model is largely presented as exactly that, a model: projections and extrapolations of quantitative trends which wouldn't look out of place in a corporate annual report. Perhaps the use of this most business-like of narrative forms goes some way to explaining why *Limits To Growth* – in stark contrast to more ecologically-oriented or emotional framings of the same problems – made a significant impact in the business sector.

<sup>3</sup> The drama/spectacle dichotomy can also be seen in literature; EE “Doc” Smith's popular *Lensman* series of space-opera novels were pure spectacle, while Ursula Le Guin's novels might be held up as exemplars of the dramatic logic, and the *Culture* novels of Iain M Banks might be seen as a roughly equal mix of the two.

<sup>4</sup> Of course, there are many reasons why one might deliberately choose to ape the form and rhetorics of product advertisements, especially in works of speculative design; satire often relies on the subversion of audience expectations of a particular form. However, as writers from Swift onwards have discovered to their chagrin, satire, much like science fiction, has its own set of reading protocols, and they are poorly represented in audiences with low literacy, whether general or medium-specific. Satire is a very powerful weapon, but powerful weapons can backfire spectacularly if not used with care.

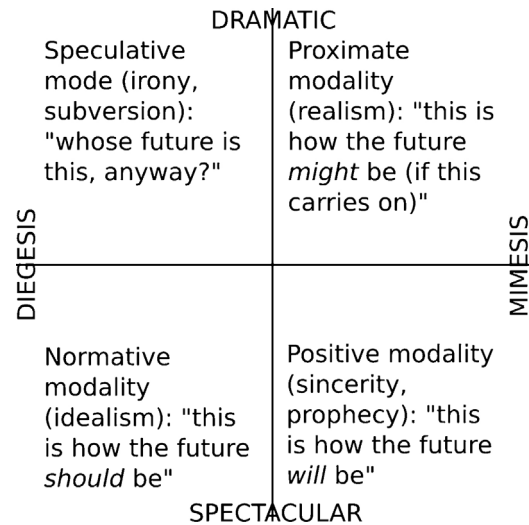


Fig. 2. Modality matrix with rhetorical mappings.

The modal dichotomy is perhaps slightly less influenced by medium than is the logical, but in general cinema and video are necessarily more reliant on the diegetic mode, because while visual media allow for a high-bandwidth delivery of a story-world's visual aesthetic in a way that text cannot touch, text holds the trump card when it comes to portraying the functional subtleties of a story-world, particularly when it comes to social relations between characters, and between characters and technologies.

This framework is still under development, and what is most needed for advancement is a wide-ranging survey of sf media and futures outputs alike, with which to populate the matrix and test the theory. In the interim, however – and in the knowledge that this is a generalisation by necessity – it can be suggested that narratives of futurity identified as partaking predominantly of the diegetic mode and the spectacular logic are most likely to possess a rhetoric of insistence and seduction, while those partaking of the mimetic mode and the dramatic logic are more likely to possess a rhetoric of persuasion and empathy. By extending this argument across the  $2 \times 2$  matrix, we can caricature the rhetorics of each quadrant as follows in Fig. 2.

One might compare the four modalities depicted above to pre-existing taxonomies of scenarios, such as the well-known "four (or five) Ps": possible, probable, plausible, and preferable (and potential). The main difference is that the four Ps is a taxonomy based on scenario *content*, while the matrix above outlines an analysis which is based on *form*.

As such, this framework does not seek to supplant or overturn more content-centric approaches to futures analysis, but to supplement them with an additional layer which addresses the ways in which certain choices made in the production of futures outputs, whether scenarios or speculative designs, may modify the *telos* of the piece as perceived by the audience. While there is no easy one-to-one mapping, it seems clear that the rhetorical framing of a future is affected by choices of narrative strategy, mode, logic and medium. Or, in other words, it is not sufficient to think only of what one wants to say about a future; one must think simultaneously about *how* one intends to say it, and whether one's tactics are suited to one's *telos*.

## 7. Conclusions

This paper has attempted to answer three broad research questions, as outlined in Section 2. First, the narratological concepts of "story", "narrative" and "world" were defined, and mapped onto their conceptual equivalents in the more specific contexts of scenario outputs and design artefacts. Secondly, the role of various narrative "voices" in relation to audience engagement and identification with a narrative were explored. Thirdly, the relationship between certain media and certain modes and logics of narrative were outlined, and their concomitant rhetorical effects described.

The conclusions of this paper can be summarised as follows:

- The concepts of *story-world*, *story/plot* and *narrative*, as found in literary and film theory, can be mapped respectively onto the concepts of *data*, *analytical approach* and *final outputs* as found in scenarios and speculative design practice.
- The narratological strategies and modes deployed in the creation of a final output have qualitative effects on the way in which an audience may parse the story being told; however, these effects are highly variable, and may only apply in their native episteme (in this case, the Anglophone liberal-capitalist West).
- Visual forms necessarily rely on the diegetic mode to achieve the cognitive estrangement effect on which both science fiction and futures work depends, while textual forms may draw more strongly on the mimetic mode.
- Both the dramatic and spectacular logics of narrative offer powers of audience persuasion; the dramatic logic seeks to persuade through meaning and empathy, while the spectacular logic seeks to persuade through shock and awe

- Certain forms and/or media, representing certain combinations of the afore-mentioned narrative strategies and modes, are structurally predisposed to producing certain rhetorical framings of the story-worlds they depict; because of their broad yet subtle power, these rhetorics can be (and are) exploited for unethical purposes, and the ethical borderlines in responsible futures practice – particularly, but far from exclusively, speculative design and design fiction – remain fuzzy and troubled for that reason.
- The risk of *accidentally* hoaxy or exploitative rhetorical framings, and of final outputs which simply fail to generate the desired effect in the audience, can be ameliorated by the careful consideration of narrative strategies and modes which best match the *telos* of the project.
- Much as Hemingway claimed that the “grace” of written fiction is related to the vast mass of material which informs the narrative without ever explicitly appearing in it, so the effectiveness final output of a futures project is related to the quality and quantity of work done in the content-creation stage of said project; while appropriate choices of narrative strategy and modality will always help a practitioner toward fulfilling the brief in accordance with the *telos* of the work, a poorly thought-out or incoherent story-world will always undermine audience impact, as will an inappropriate or undercooked analytical “plot”.

This is, perforce, a mere preliminary stroll along what may be a fruitful avenue for futures research. It is hoped that the strategies and phenomena described herein will provide a platform from which futurists might engage with their final outputs with greater confidence and skill. However, it is our belief that this theoretical framework is also a vital first step toward a much-needed discussion on ethics in futures practice. In a world made up of stories, the creation of stories is an inherently political act; that we have access to platforms from which to spread them is a privilege, but also a responsibility.

### Acknowledgements

The authors would like to thank the organisers and attendees of Oxford Futures Forum 2014 for both the opportunity to develop and discuss the ideas discussed herein, and for their input to that discussion.

### References

- Abbott, H. P. (2008). *The Cambridge Introduction to Narrative*. Cambridge University Press.
- Bassett, C., Steinmueller, E., & Voss, G. (2013). Better Made Up: The Mutual Influence of Science fiction and Innovation (No. 13/07). NESTA working paper.
- Benjamin, W. (2008). *The Work of Art in the Age of Mechanical Reproduction*. UK: Penguin.
- Berger, J. (2008). *Ways of Seeing*. UK: Penguin.
- Bosch, T., (2012) Sci-Fi Writer Bruce Sterling Explains the Intriguing New Concept of Design Fiction. Slate.com. The Slate Group, 2 Mar. 2012. [http://www.slate.com/blogs/future\\_tense/2012/03/02/bruce\\_sterling\\_on\\_design\\_fictions\\_.html](http://www.slate.com/blogs/future_tense/2012/03/02/bruce_sterling_on_design_fictions_.html) (accessed 14.02.15.).
- Clute, J. (2014). *Stay: Essays and Reviews*. Becon Press.
- Delany, S. R. (2013). *Three Letters to Science Fiction Studies in Starboard Wine*. London: Gollancz (ebook).
- Dunne, A., & Raby, F. (2013). *Speculative Everything: Design, Fiction, and Social Dreaming*. MIT Press.
- Gurevitch, L. (2009). Problematic dichotomies: narrative and spectacle in advertising and media scholarship. *Popular Narrative Media*, 2(2), 143–158.
- Hemingway, E. (1999). *Death in the Afternoon*. Simon and Schuster.
- The Cambridge Companion to Narrative. In D. Herman (Ed.), ()Cambridge University Press.
- Joyce, J. (2004). *Ulysses*. Digireads.com Publishing.
- Kirby, D. (2009). The future is now: diegetic prototypes and the role of popular films in generating real-world technological development. *Social Stud. Sci.*, 40(1), 41–70.
- Kurzweil, R. (2005). *The Singularity is Near: When Humans Transcend Biology*. Penguin.
- Oreskes, N., & Conway, E. M. (2014). *The Collapse of Western Civilization: A View from the Future*. Columbia University Press.
- Plato (2003). *Book III Plato: The Republic*. Penguin.
- Ralph, P., & Wand, Y. (2009). *A Proposal for a Formal Definition of the Design Concept*. In *Design Requirements Engineering: a Ten-year Perspective*. Berlin, Heidelberg: Springer103–136.
- Business Planning for Turbulent Times: New Methods for Applying Scenarios. In R. Ramírez, J. W. Selsky, & K. Van der Heijden (Eds.). Taylor & Francis.
- Raven, P. G. (2014). The future's four quarters: proposing a quadrant methodology for strategic prototyping in infrastructural contexts. *Technol. Forecasting Social Change*, 84, 115–130.
- Raven, P.G., The rhetorics of futurity: scenarios, design fiction, prototypes, and other evaporated modalities of science fiction. Foundation (2015, in press).
- Schroeder, K. (2011). *Fiction as Foresight: Presenting Foresight Findings as Fiction*. Thesis. OCAD University.
- Shell (2008a). *Shell Energy Scenarios to 2050: An Era of Revolutionary Transitions*. Royal Dutch Shell.
- Shell (2008b). *Scenarios: An Explorer's Guide*. Shell International BV.
- Smith, S. (2014) Beware of Flatpack Futures. Presentation: Media Future Week 2013, Hilversum, Netherlands. <https://vimeo.com/66314529> (accessed 14.02.15.).
- Stross, C. (2007). *Halting State*. Penguin.
- Stross, C. (2011). *Rule 34*. Hachette UK.
- Suvin, D. (1972). On the poetics of the science fiction genre. *College English*, 34(3), 372–382.
- Swift, J. (2005). *Gulliver's Travels*. Oxford University Press.
- Van der Heijden, K. (1996). *Scenarios: The Art of Strategic Conversation*. John Wiley & Sons.
- Wolfe, G. (1994). *The Fifth Head of Cerberus: Three Novellas*. Macmillan.
- Woolf, V. (2012). *Mrs. Dalloway*. Broadview Press.