



**HAL**  
open science

## Parabolic thinking: story as mental instrument

Jean-Rémi Lapaire

► **To cite this version:**

Jean-Rémi Lapaire. Parabolic thinking: story as mental instrument . Marie-Hélène Fries. Métaphore et Anglais de spécialité, Collection Travaux 20.25, pp.21-44, 2005. halshs-01633131

**HAL Id: halshs-01633131**

**<https://shs.hal.science/halshs-01633131>**

Submitted on 11 Nov 2017

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# Parabolic thinking: story as mental instrument<sup>1</sup>

I will open my mouth in parables, I will  
utter what has been hidden since the  
foundation of the world. (Mt 13. 35)

## Introduction

Cognitive linguistics explores the link between *symbolic structure* and *conceptual structure*. A major claim made by cognitive linguists is that the semiotic conventions of language are not arbitrary but motivated. Linguistic conceptualisation is related to general cognitive processing and organization. “Lexicon, morphology and syntax form a continuum of symbolic units (...) characterized relative to knowledge systems” (Langacker 1991: 1). Knowledge itself is conceived as *embodied* and *imaginative*, a hybrid phenomenological construct that is dependent on “neural networks” (Lakoff and Johnson 1999: 16) and crucially linked to “sensory, kinaesthetic, and emotive experience” (Langacker 1991: 2). The study of language is thus conducted with essential reference to body-based *cognitive abilities* and *mechanisms*, language being viewed simultaneously as a *product*, an *instrument* and a *reflector* of human cognition at large.

A central – but often underestimated – feature of human cognition is *narrative imagining* (Turner 1996), a process best defined as the adoption of *narrative format* to report and analyse experience, and more generally to make sense of the world. Humans are fundamentally *storytelling creatures* that are constantly engaged in the socio-cognitive process of giving *narrative accounts* or *rationalizations*<sup>2</sup> of their lives (Johnson 1993: 150-84). The narrative framing of self and action requires the conversion of *experience* into mental, perceptual, physical, or communicative *events*<sup>3</sup>, involving *actors*, *plots* and *settings*. As Mark Turner (1996) hypothesizes, *story* could well be the backbone of *syntax*, and participant *roles* the foundation of *argument structure*. “Narrative structure” would thus form the conceptual and communicative basis of “grammatical structure”:

[T]he basic abstract story in which an animate agent performs a physical action that causes a physical object to move in a spatial direction is projected to create

---

<sup>1</sup> Published in *Métaphore et anglais de spécialité*, Marie-Hélène Fries (ed.), p.p. 21-44. Bordeaux: Travaux E.A. 20.25. Université Victor Segalen, 2005 (ISBN 2-9506462-3-9). The title of this paper makes overt reference to Turner’s theory of *parabolic thinking* (1996). “Mental instrument” suggests that cognizers are metaphorically construed as *concept-manipulators* using various “conceptual tools.” Turner himself remarks that “[w]hen we talk of ‘cognitive instruments’ or ‘conceptual tools’ (...) we are understanding the action of thought by projection from the body action of manipulation, specially manipulation for the purpose of manufacture.” (Turner 1996: 44).

<sup>2</sup> Building on Ricœur (1984) and MacIntyre (1984), Johnson (1993) claims that the socio-cognitive function of narrative is not confined to mere “storytelling” (154). Narrative, he remarks, is “a culturally accepted mode of explanation” (158). Pragmatically, “What’s the story?”, “Give us a full account!” function as invitations to report events and “account” for them.

<sup>3</sup> Grammar is instrumental in forcing us to convert *experience* into *events* and reporting them as *stories*. E.g. *She understood...* (mental event); *They felt...* (perceptual event); *You broke...* (physical event); *I talked to ...* (communicative event), etc.

the grammatical structure we see in “John pushes the ball onto the court,” “David tosses the can into the yard,” and “Mary throws the stone over the fence.” The abstract narrative structure is projected to create the abstract grammatical structure. The abstract narrative structure includes an agent, an action, an object and a direction. The abstract grammatical structure includes a noun phrase followed by a verb phrase followed by a prepositional phrase, with the first noun phrase as Subject and Agent and the second noun phrase as Direct Object and Patient.

The first abstract structure is conceptual and narrative. The second abstract structure is grammatical. (142-43)

As Turner’s repeated use of “projection” suggests, stories can be mapped onto other stories (or domains) – a cognitive process referred to as *parabolic projection*.

Story is a basic principle of the mind. Most of our experience, our knowledge, and our thinking is organized as stories. The mental scope of story is magnified by projection – one story helps us make sense of another. The projection of one story onto another is parable, a basic cognitive principle that shows up everywhere. (Turner 1996 : v)

It is this powerful combination of *story* with *projection*<sup>4</sup> that yields *parabolic thinking*<sup>5</sup>, a universal and indispensable *mode of thought* (Turner 1996: 7), possibly the most fundamental *mechanisms of imaginative cognition*<sup>6</sup>, as the present paper intends to demonstrate.

### 1. Key structural features of parable

*Parables*<sup>7</sup> are first and foremost *stories* that display the central properties of prototypical narratives, such as the establishment of *spatial* and *temporal location*, the *definition* and *sequencing* of *events*, the identification of *participants*, the distribution of *roles*, the imposition of *beginning-middle-end* structure and the monitoring of *movement* towards some conclusion or resolution. Such “rhetorical conventions” relate to general capacities of the human brain: the capacity to *locate* (objects, people, sounds, events, etc.); the capacity to *construct sequences* (of movements, actions, events, etc.); the capacity to *assign roles* or *functions* (to people, to things); the capacity to *apply image schematic structure* to domains of knowledge and experience (as when the SOURCE-PATH-GOAL<sup>8</sup> schema is applied to narrative progression<sup>9</sup> or logical reasoning<sup>10</sup>), and so forth.

<sup>4</sup> “The essence of parable is its intricate combining of two of our basic forms of knowledge – story and projection.” (Turner 1996: 5)

<sup>5</sup> A term coined by Mark Turner in *The Literary Mind* (1996: 168).

<sup>6</sup> The phrase is Mark Johnson’s in *Moral Imagination* (1993: 33).

<sup>7</sup> *Parable*, from Old French *parabole*, from Latin *parabola* “comparison”, from Greek *parabole* “analogy”, from *paraballein* “to throw alongside”, from *para-* “alongside” + *ballein* “to throw”. *Collins English Dictionary*. London & Glasgow: Collins, 1979.

<sup>8</sup> The “internal spatial logic” of this schema is well summarized by George Lakoff and Rafael Núñez (2000: 37-38): “[T]here is a moving entity (called a trajector), a source of motion, a trajectory of motion (called a path), and a goal with an unrealised trajectory approaching that goal.”

<sup>9</sup> In his discussion of “the narrative context of self and action” (1993: 150-84), Mark Johnson argues that “the beginning-middle-end structure” of the prototypical narrative “is an instance of an even more basic recurring imaginative pattern – the SOURCE-PATH-GOAL SCHEMA – that structures so much of our bodily movement and perception.” This schema, he claims, “is

But parables are not just *any kind* of narrative. Their internal configuration must be suited to their specific *interpretive* or *explanatory* function.

1. *Brevity*. Parables are brief narratives. As such, they function as *short synthesizing structures* that *connect* and *compress* events and meanings. In a way similar to that of myth or proverbs, parables act as “integrative mind tools” (Donald 1991: 215).
2. *Clarity* and *consistency*. Parables have an argumentative function that rests on a clear communicative contract between storyteller and listener: simplicity of dramatic structure; plausibility of causal structure; accessibility of thematic content. Events must be readily identified and connected by simple narrative ordering, in strict conformity with the culturally established rules of logical or chronological linkage.
3. *Descriptive containment*. Some amount of *guessing*<sup>11</sup> has to be performed by the hearer: the target notion is “not described but circumscribed”, as “a circle of words [is] drawn around it” (Frye 1973 [1957]: 300).
4. *End-focus*. The narrative development of parable is determined by the thematic resolution of the story. The true point of the story is its endpoint.
5. *Impact*. The choice of plot, participants and setting must instantly and forcibly strike the listener’s feelings and imagination, while powerfully appealing to his or her reason.
6. *Familiarity*. The “stories” featured in parables are often drawn from a stock of *cultural narratives*, like “farmer sows wheat seeds”, “wealthy man-throws a big party”, “traveller embarks on a journey”, “sick man wants to be cured”, etc. Each comes with a relatively typified pattern of action and participants, emblematic of culturally validated world experience. *Conventional expectations* are raised from the outset and *prepackaged causal and inferential structure* remain available throughout the narrative as background cognition<sup>12</sup>.

---

operative at least three levels in stories: in the “physical journeys” made by characters; in the mental journeys we make, as readers or listeners that “*follow* the story itself metaphorically along its path, (...) from start to finish” and eventually as we make sense of “purposive activity” through “the purposes are destinations metaphor” (166).

<sup>10</sup> *Reasoning* is commonly construed as a *mental journey* along a *PATH* - or *line of thought*. Ideally, the conceptualizer’s mind *moves* step-by-step from *premise* (SOURCE) to *conclusion* (GOAL).

<sup>11</sup> “La parabole invite à chercher (...) [C’est] un texte [à la fois] clair et voilé” (Antoine Moussali. *Dictionnaire international des termes littéraires / International Dictionary of Literary Terms*. Edited by Jean-Marie Grassin. Web version: [www.ditl.info](http://www.ditl.info)).

<sup>12</sup> The most thought-provoking Gospel parables have “conventional expectations” clashing. In *The Parable of the Prodigal Son* (Luke 15.11-32), the tension between the father’s joy and forgiveness and his elder son’s anger and resentment is by no means easy to resolve, since both are perfectly consistent with “normal” and therefore “anticipated” behaviour. *The Parable of the Dishonest Steward* (Luke 16.1-9) in which “the master commended the dishonest steward for his shrewdness” has caused much debate among Bible scholars because of the surprising twist in the conclusion: “*And I tell you, make friends for yourselves by means of unrighteous mammon, so that when it fails they may receive you into the eternal habitations*” (16. 9). The shocking incongruity of the message is not easily dispelled, despite commentators’ attempts to show that shrewdness and resourcefulness are praised – not dishonesty – and Anna Wierzbicka’s insightful

As will become apparent later, the “familiar stories” used in parables may also include more basic *stories of body action* – like moving through space, grasping a physical object (Turner 1996: 33-34) – or *scenes and event types essential to human experience* (Goldberg 1995: 39), like “someone experiencing something”, “something having an effect on someone”, etc.

The following Gospel parables epitomize the central properties listed above. All target the same entity - “the kingdom of heaven” – and attempt to characterize - rather than define – the barely nameable or conceivable<sup>13</sup>.

*The Parable of the Mustard Seed.*

The kingdom of heaven is like a grain of mustard seed which a man took and sowed in his field; it is the smallest of all seeds, but when it has grown it is the greatest of shrubs and becomes a tree, so that the birds of the air come and make nests in its branches. (Matthew 13.31-33)

*The Parable of Leaven*

The kingdom of heaven is like leaven which a woman took and hid in three measures of flour, till it was all leavened. (Matthew 13.33)

*The Parable of the Hidden Treasure.*

The kingdom of heaven is like a treasure hidden in the field, which a man has found and covered up; then in his joy he goes and sells all that he has and buys that field. (Matthew 13.44)

*The Parable of the Precious Pearl*

Again, the kingdom of heaven is like a merchant in search of fine pearls, who, on finding one pearl of great value, went and sold all that he had and bought it. (Matthew 13. 45)

## 2. Parable in religious or literary format: from dramatic to interpretational structure

Go your way; behold, I send you out as lambs in the midst of wolves. (Luke 10.3)

*Parable* is traditionally defined as a particular type of *allegory*<sup>14</sup> – that is, “a narrative in which the agents and action, and sometimes the setting as well, are contrived not only to make sense in themselves, but also to signify a second, correlated order of persons, things, concepts, or events” (Abrams, 1971: 4). Like the *exemplum*<sup>15</sup>, the *fable*<sup>16</sup> or *proverbs*<sup>17</sup>, the parable is a short, meaningful

---

remark that Jesus resorts to “a technique that consists of using mixed or even predominantly negative models to illustrate positive characteristics.” (2001: 418).

<sup>13</sup> “Dans les Evangiles, la parabole (...) dit plus qu’elle ne dit. [Elle] veut dire par le langage ce qui échappe au langage. (...) Une manière de nommer l’innommable” (Antoine Moussali. *Dictionnaire international des termes littéraires*).

<sup>14</sup> From Greek *allegorein* “to speak figuratively”, from *allos* “other” + *agoreuein* “to make a speech in public.”

<sup>15</sup> An anecdote supporting a moral point in a sermon. By extension, a tale that sustains an argument in a formal exhortation. In the Middle Ages, it was common for preachers to borrow stories from extensive, purpose-made collections of exempla.

<sup>16</sup> From Latin *fabula* “story”, “narrative”, from *fari* “to speak, say”. A short story devised to convey a moral lesson, which is typically summarized by the narrator or one of the characters in

story designed to convey some “moral thesis” or exemplify some “principle of human behavior” with clarity, concision and a sense of wholeness. But whereas the “useful moral lesson”<sup>18</sup> taught by the fable is normally explicit<sup>19</sup>, much is left *unsaid* in the parable. On occasion though, moral instruction may be overtly inculcated through *analogical extension*, as in the Gospel parables of *The Unforgiving Servant* and *The Two Builders*:

*The Parable of the Unforgiving Servant* (conclusion)

Then his lord summoned him and said to him, ‘You wicked servant! I forgave you all that debt because you besought me; and should not you have had mercy on your fellow servant, as I had mercy on you? And in anger his lord delivered him to the jailers, till he should pay all his debt. *So also* my heavenly Father will do to every one of you, if you do not forgive your brother from your heart.’<sup>20</sup> (Matthew 18.32-35)

*The Parable of the Two Builders*

“Every one who hears these words of mine and does them will be like a wise man who built his house upon the rock; and the rain fell, and the floods came, and the winds blew and beat upon that house, but it did not fall, because it had been founded on the rock. And everyone who hears these words of mine and does not do them *will be like* a foolish man who built his house upon the sand; and the rain fell, and the floods came, and the winds blew and beat against that house, and it fell; and great was the fall of it.”<sup>21</sup> (Matthew 7. 24-27)

In some extreme forms of clarification, the entire *allegorical code* of the parable is *cracked* by the narrator, as in *The Parable of the Weeds*, reported in Matthew 13.36-40, or the more complex *Parable of the Sower*<sup>22</sup>, told in Matthew 13.3-8, Mark 4.3-8, and Luke 8.4-15.

*The Parable of the Weeds explained.*

And his disciples came to him, saying “Explain to us the parable of the weeds of the field.” He answered, “He who sows the good seed is the Son of man; the field is the world, and the good seed means the sons of the kingdom; the weeds are the sons of the evil one, and the enemy who sowed them is the devil; the harvest is the

---

the form of an epigram. Fables may also be composed to reveal aspects of human behavior. Most common is the *beast fable*, employing animals to represent human types. (M.H. Abrams 1971:5 ; M. Drabble and J. Stringer 1987: 192).

<sup>17</sup> “Proverbs frequently present a condensed, implicit story to be interpreted through projection. (...) ‘When the cat’s away, the mice will play,’ said at the office, can be projected on a story of boss and workers. Said in the classroom, it can be projected onto a story of teacher and students.” (Turner 1996: 5-6).

<sup>18</sup> Drabble and Stringer 1987: 192.

<sup>19</sup> In many of Lafontaine’s beast fables - like *The Wolf and the Lamb* (“Le Loup et l’Agneau”) – the “moral thesis” is stated before the illustrative tale unfolds: *The strong are always best at proving they’re right. Witness the case we’re now going to cite* (“La raison du plus fort est toujours la meilleure. Nous l’allons montrer tout à l’heure”).

<sup>20</sup> The threatening final verses are probably Matthew’s own creation (cf. Wierzbicka 2001: 311). Italics ours.

<sup>21</sup> Italics ours.

<sup>22</sup> “A sower went out to sow. And as he sowed, some seeds fell along the path, and the birds came and devoured them. Other seeds fell on rocky ground, where they had not much soil, and immediately they sprang up, since they had no depth of soil, but when the sun rose they were scorched; and since they had no root they withered away. Other seeds fell upon thorns, and the thorns grew up and choked them. Other seeds fell on good soil and brought forth grain, some a hundredfold, some sixty, some thirty.” (Matthew 13.3-8).



close of the age, and the reapers are angels. Just as the weeds are gathered and burned with fire, so will it be at the close of the age.” (Matthew 13.36-40)

*The Parable of the Sower explained.*

“Now the parable is this: The seed is the word of God. The ones along the path are those who have heard; then the devil comes and takes away the word from their hearts, that they may not believe and be saved. And the ones on the rock are those who, when they hear the word, receive it with joy; but these have no root, they believe for a while and in time of temptation fall away. And as for what fell among the thorns, they are those who hear, but as they go on their way they are choked by the cares and riches and pleasures of life, and their fruit does not mature. And as for that in the good soil, they are those who, hearing the word, hold it fast in an honest and good heart, and bring forth fruit with patience. (Luke 8.11-15)

The “explanation” – which was probably appended by the evangelists (Wierzbicka 2001: 258) – involves a careful deconstruction of the *metaphorical relations* – or *mappings* (Lakoff 1993) – between *source domain* (seeds) and *target domain* (Christ’s words). The mapping may also be analyzed as the metaphorical transfer of dramatic and conceptual structure from a *source story* (laborer sowing seeds; seeds growing differently in different places) to a *target story* (Jesus disseminating the truth of the kingdom of God; different people responding differently to his teachings).

Elucidation introduces a rigid interpretational frame which destroys much of the parable’s inspirational force and imaginative resources. Yet, clarification may be a way of underscoring the special spiritual significance of the message. This certainly applies to Christ’s *Parable of the Sower*, but also to other foundational narratives, such as the Tendai<sup>23</sup> *Parable of The Burning House*<sup>24</sup>.

*The Parable of the Burning House explained (excerpts)*

He sees how the creatures are burnt, tormented, vexed, distressed by birth, old age, disease, death, grief, wailing, pain, melancholy, despondency; how for the

<sup>23</sup> Tendai Buddhism spread from China to Japan in the 8<sup>th</sup> Century. The Tendai sect was established by Dengyo Daishi on Mount Hiei (where the main temple and headquarters of Tendai Buddhists have remained to this day). The “founding father” was given imperial permission to teach the Lotus Sutra – a collection of dialogues and discourses regarded by the Tendai as the final and most authentic revelation of the Buddha. Tendai Buddhists believed that all humans could be redeemed and reach universal “enlightenment” (David J. Lu, 1974: 52-54). A summary of Tendai Lotus teachings and history can be obtained on [www.tendai-lotus.org](http://www.tendai-lotus.org), the official website of the sect.

<sup>24</sup> The use of parables was one of the favorite methods of Tendai teaching. *The Parable of the Burning House* was quite obviously designed to show the superiority of the *Lotus (of the Wonderful Law)* over traditional Buddhist teaching. The parable opens with a vision of the overcrowded and tottering house of tradition which has caught fire and is about to collapse. “Ignorant boys” – that is, ordinary, trusting believers in the infancy of enlightenment – play around, heedless of the impending disaster. A wise man, “knowing the disposition of the boys”, tells them that some beautiful toys are lying outside the house: “Come, run out, leave the house, to each of you I shall give what he wants. Come soon, come out for the sake of these toys.” On hearing the names of their favorite toys (“bullock-carts, goat-carts, deer-carts”), the children “quickly rush out from the burning house,” are saved, and soon wonder at the sight of the new treasure (“the inconceivable bliss of [true] Buddha knowledge.” In the lengthy analysis that immediately follows, the storyteller comments on “skilful device” used by the wise man “to persuade the children to get out of the burning house and save their lives”. The ontological and epistemic correspondences between the old house and tradition, the fire and “the burning mass of misery” brought by worldly pain and illusion, the beautiful “carts” (used to lure the boys out of the house) and the superior “vehicles” of knowledge (brought by the *Lotus*).

sake of enjoyment, and prompted by sensual desires, they suffer various pains. (...) And while incessantly whirling in that mass of evils they are sporting, playing, diverting themselves; they do not fear, nor dread, nor are they seized with terror; they do not know, nor mind; they do not try to escape, but are enjoying themselves in [a] world which is like a burning house. (...)

Here, as in *The Parable of the Sower*, the truth revealed is the most fundamental of all: those who give up their corrupt ways and abandon their old, illusory beliefs will be saved. As they listen to the new words of wisdom and adhere to the higher order of meaning contained in the Lotus Sutra, converts will become enlightened, etc.

### 2.1. “Speaking in parables”

Again he began to teach beside the sea. And a very large crowd gathered about him (...). And he taught them many things in parables. Mark 4.1-2

In Western Culture, parable is the hallmark of Christ’s teachings. Matthew notes that Jesus “said nothing to them without a parable” (13.34). As the frequent mention of “large crowds” suggests, Gospel parables have a marked *communal dimension*. Parables are *socially* and *cognitively cohesive*. They are instrumental in creating a “collectivity of mind” (Donald 2001) among believers. The *common narrative* generates *common thinking* and establishes a “cognitive community.” Just as *mythic narratives* “ruled” and “glued” the minds of “every tribe and village” in “oral-mythic culture” (295-96), Christ’s parables made it possible for “individual minds [to be] integrated into a corporate cognitive process” (298). As stories encapsulating shared moral and spiritual values, Gospel parables were able to develop into a repertoire of *narrative models for human thought and action* that has survived to this day.

It is interesting to note that the contemporary definitions of parable given in reference dictionaries and glossaries display striking similarities in wording and emphasis:

A short story teaching a moral lesson. (*Holy Bible. Dictionary-Concordance. Revised Standard Version*. Nashville / New York: Thomas Nelson)

A short simple story that teaches a moral or religious lesson, especially one of the stories told by Jesus in the Bible. (*Longman Dictionary of Contemporary English*)

A short story that uses familiar events to illustrate a religious or ethical situation. Any of the stories of this kind told by Jesus Christ. (*Collins English Dictionary*)

The focus is on *instruction* and the protagonist of the *parabolic act* is the *teacher-narrator*, not the listener. Interestingly, Christ takes a more *cognitive* approach to his own *parabolic preaching* than modern lexicographers and Bible scholars. The stories “put before the crowd” are for people to “hear”, so that they might “know the secrets of heaven.” The emphasis is placed on *the process*



of understanding (“know”, “perceive”, “understand”) and the true protagonist, is not the storyteller but the audience, as the three synoptic versions of *The Parable of the Sower* attest:

*Why speak in parables?*

Then the disciples came and said to him, “Why do you speak to them in parables?” And he answered them, “To you it has been given to know the secrets of the kingdom of heaven, but to them it has not been given (...) This is why I speak to them in parables, because seeing they do not see, and hearing they do not hear, nor do they understand (...) (Matthew 13.10-13)

And when he was alone, those who were about him with the twelve asked him concerning the parables. And he said to them, “To you has been given the secret of the kingdom of God, but for those outside everything is in parables; so that they may indeed see but not perceive, and may indeed hear but not understand; lest they should turn again and be forgiven.” (Mark 4. 10-14)

“He who has ears to hear, let him hear.” And when his disciples asked him what the parable meant, he said, “To you it has been given to know the secrets of the kingdom of God; but for others they are in parables.” (Luke 8.8-10)

*The Parable of the Sower* is undoubtedly the “key” to the reception of Christ’s other parables as it “highlights the importance of hearing” (Wierzbicka 2001: 264). As he answers the disciples’ question – “Why do you speak to them in parables?” – Jesus plays on both the *perceptual* and *conceptual* senses of “hearing” (and “seeing”). In doing this, he sets up a *ceptual blend* (Lapaire 2004), in which *perception* and *conception* are integrated: “He who has ears to hear [and a mind to know], let him hear [and understand]”. Gospel parables are thus rooted in *ception* (Talmy 2000) and designed to be *listener-*, *viewer-* and *cognizer-friendly*. Their remarkable *cognitive efficiency* is imputable to the following set of properties:

- a. *Access*. Gospel parables present themselves as *ways*<sup>25</sup> of *accessing* God’s Wisdom, and are accordingly ruled by “the principle of access” (Fauconnier & Sweetser 1996: 7):

The **Principle of Access** : an expression which names or describes one entity (the trigger) can be used to access (and hence refer to) an entity (the target) in another domain if the second domain is cognitively accessible from the first, and if there’s a connection between trigger and target. (7)

- b. *Integration*. Not only do parables *integrate* hybrid conceptual structure into a single *narrative space* but they also *integrate* outsiders into the people of God and its shared understanding of divine wisdom (cf. “for those *outside* everything is in parables” Mark 4.11).
- c. *Cultural storage*. From the outset, Gospel parables were meant to enter *the communal memory system* and quite successfully did, thus becoming part of *the cognitive network of culture* (especially in the Middle Ages).

<sup>25</sup> The word “way” is here to be taken in its spatial (“path”) and related modal sense (“manner”).

- d. *Recoverability*. Having entered the *shared universe* of the religious community, major Gospel parables function as *definite cultural referents* that can be *instantly accessed* by all members of the cognitive network.
- e. *Situatedness*<sup>26</sup>: Gospel parables were originally told from a *perspective* and located in a specific spatial, historical and epistemic context. Through conventionalisation and “spiritualization”, the stories and their messages freed themselves from contextual limitation and eventually acquired the conceptual extensionality of “timeless of truths.”
- f. *Thematic salience*: Gospel parables bring a particular aspect of divine truth into cultural awareness. This involves:
- the *selection* of the relevant aspects of moral and spiritual experience which are to be *profiled* (highlighted)
  - the *focussing of attention* on a *bounded conceptual region* – that is, the “theme” or the parable.
- g. *Dramatic simplification*. The characters in Gospel parables are usually indeterminate (faceless) social actors (e.g. “a woman”, “a certain king”, “a servant”) or types (e.g. the pious and self-righteous “Pharisee”, the [money-grubbing] “tax collector”, the “house builder”) involved in some simple activity like baking bread, buying a field, observing established religious ritual, erecting a house, etc.
- h. *Compression of intricate conceptual structure*. Parables are small containers for condensed notional content. Indeed, the short story told in parable *compresses* over time, space, personality and thought. Identity and interaction are quite schematic. Yet, the “bare essentials” of dramatic structure are enough to invoke, condense and simplify complex or elusive conceptual structure.
- i. *Extension*. Gospel parables are small local stories endowed with global spiritual significance. This is achieved through a twofold process of *extension*:
- extension through metaphorical *projection* from source to target story.
  - extension through *generalisation*<sup>27</sup>. Parable rests on a *cognitive shift from specific to generic reference / relevance*. Thus, the metaphysics of building (in Matthew 7. 24-27) is

---

<sup>26</sup> For a definition of *situatedness*, see Croft and Cruse (2004: 58-59).

<sup>27</sup> The French linguist Gustave Guillaume (1883-1960), whose theory of *psychomechanics* was essentially cognitive, regarded the shift from generic (or universal) to specific (or singular) scope as the most fundamental thought process of all. « Dans la langue (...) sont inscrits (...) les grands mouvements inhérents à la pensée humaine, ceux qui sont inséparables d'elle et dont on serait fondé à dire qu'ils la créent autant et plus qu'elle ne les crée. Ils se confondent avec son existence même, et s'ils n'étaient point en elle, elle ne serait point, tenant d'eux sa puissance. Les deux plus importants de ces mouvements créateurs de la puissance de la pensée sont l'accession au général au travers du particulier et, inversement, l'accession au particulier à partir du général. » (1969 : 145-46)

extended to all serious human endeavor. The “truth” that holds for a particular character somewhere, involved in some meaningful activity, is relevant to any human being, anywhere, who is willing to embrace the timeless, boundless wisdom of God,

- j. *Pragmatic identification.* Gospel parables are both doctrinal and utilitarian pieces. They are designed to bring *practical change* (to the world), to encourage people to alter their ways and reconsider their misconceptions. For this pragmatic design to be achieved, individual listeners must at some point *identify* with the protagonists. A shift from “external” to “internal” perspective must thus take place, negotiated through metaphorical extension. As we listen to the *Parable of the Wise and Foolish Builders*, we are led to think of ourselves as the “foolish builders” of our own lives. All the more easily, as it is common to construe life as a container or building – the “house of experience” (Henry James).
- k. *Paradox.* Gospel parables are paradoxical in nature. Christ both used and attacked the religious order and the cultural frames of his times. In *The Parable of the Pharisee and the Tax Collector* (Luke 18.9-14), the protagonists conform to the social stereotypes of the pious, God-fearing Pharisee and the mean (or dishonest) tax collector. But, as it *turns out*, the self-righteous Pharisee’s prayer is a piece of arrogant self-praise, compared to the “humble” breast-beating of the sinful tax collector. The *parabolic twist* brought about by Christ’s interpretation of the scene, defied conventional expectations and provocatively established a new and higher order of moral perception.

He also told this parable to some who trusted in themselves that they were righteous and despised others: “Two men went up into the temple to pray, one a Pharisee and the other a tax collector. The Pharisee stood and prayed thus with himself, ‘God, I thank thee that I am not like other men, extortioners, unjust, adulterers, or even like this tax collector. I fast twice a week, I give tithes of all that I get.’ But the tax collector, standing far off, would not even lift up his eyes to heaven, but beat his breast saying, ‘God, be merciful to me a sinner!’ I tell you, this man went down to his house justified rather than the other; for every one who exalts himself will be humbled, but he who humbles himself will be exalted.”

Such is the *cognitive efficiency* of Gospel parables – old and new<sup>28</sup> – that many are still used today by Evangelical Christians to define the essence of Faith,

---

<sup>28</sup> Some Evangelical websites, such as [web-ministry.com](http://web-ministry.com), list and interpret the parables of Christ with a literalness and explicitness that destroys their imaginative character and ultimately converts them into sermons. Other sites, such as [caterpillar.org.uk](http://caterpillar.org.uk), do just the opposite. More imagery and dramatic structure are added to existing configurations and encourage – rather than restrict – imaginative rationalizations of Christian doctrine. *The Parable of the Sower* is thus reframed and animated as *The Parable of the Rooster*. New narratives, based on simple plots that “make more sense” to young readers of our times, are sometimes added to the existing repertoire. E.g. *The Parable of the Caterpillar*: “*The Caterpillar struggles with his everyday existence, munching his way through the leaves (...) He doesn't know that one day he will be fluttering from flower to flower(...) gloriously adorned with the colours of the rainbow, as light as the air on which he floats. His future God has planned - the wonderful change from what he is now to what*

explain the blessings of God or trace the path of self-improvement and salvation.

Science fiction writers also show a special taste for the conceptual and imaginative resources of (Gospel) parables, as exemplified by Octavia Butler's *Earthseed* series, named after the original New Testament Parables: *Parable of the Sower* (1993) and *Parable of the Talents* (1998). But long before Butler's heroine, Lauren Olamina, was shown preaching the simple creed of her new religion (*Earthseed*) in a violent 21<sup>st</sup>-century America plagued by global warming, massive unemployment, gang warfare and corporate greed, *parabolic thinking* was thriving in oral and written "literature."

## 2.2 Parable in literary format: from parabolic projection to parabolic blending

Classical *myths*, *allegories* and *fables*, English medieval *ballads*<sup>29</sup>, metric<sup>30</sup> or prose<sup>31</sup> *romances*, *debate poems*<sup>32</sup>, *tales*<sup>33</sup>, *miracle*, *mystery*<sup>34</sup> and *morality*<sup>35</sup> *plays*, to mention but a few examples in European literary history, use the cognitive resources of *narrative imagining* and *projection*. The *overt source story* (Turner 1996:6) – in which gods, heroes, talking beasts, personified virtues and vices<sup>36</sup> interact – is projected onto some more essential *target story* focused on:

---

*he will become once time has passed. He cannot see the future, nor the butterflies which flit across the sky. On that day, though, he shall become like them.*", etc.

<sup>29</sup> Ballads were "sung or recited dramatically". In many, the themes were "recognizably those of medieval romances" (Speirs 1959: 39).

<sup>30</sup> Famous English verse (or metrical) romances include *King Horn* (c. 1225), *Havelok the Dane* (c. 1275). Many English romances were based on earlier French romances, which were themselves related to Celtic tales forming the substance of the Arthurian romances and the Breton lays. All have recurring themes: the problematic union between a mortal and a other-worldly being; the boy born to be king but exposed or exiled; cycles of separation and restoration undergone by a wife or queen; successions of tests (rites of passage / initiation) which a knight must undergo to prove his manhood; contests between a knight and some other other-world character with a combat as climax; ritual combat, followed by ritual marriage, etc. (Adapted from Speirs 1959).

<sup>31</sup> E.g. Malory's *Morte D'Arthur* (c. 1485).

<sup>32</sup> E.g. *The Owl and the Nightingale* (c. 1220).

<sup>33</sup> E.g. Chaucer's *Canterbury Tales* (c. 1386-1400); Gower's *Confessio Amantis* (c. 1390)

<sup>34</sup> Named after the trade (Fr. *mestier*) of their performers. A form of ritual drama based on great biblical stories (from the Creation to the Ascension) that was extremely popular in England from the 13<sup>th</sup> to the late 16<sup>th</sup> cent. Mystery plays were performed annually during Corpus Christi processions. "The Mystery Cycle represents or reproduces what might perhaps be called **a history of the world** – of mankind in relation to God – from the Creation to the Last Judgement. (...) The purpose or effect of the annual performance was evidently that of a ritual, namely to give significance or meaning to life for that year. The significant past had to be, and therefore was, annually recreated in order to make, and make fortunate, the future for that year, fortunate for the community as a whole and for each individual member of it. Between the Creation and the Judgement the central mystical events – central for everyone concerned – are the birth, death, and resurrection of Christ. The whole corresponds to the cycle of the Christian year." (Speirs 1959: 45-49)

<sup>35</sup> E.g. *The Castell of Perseverance* (c. 1405), *Wisdom* (c. 1460), *Everyman* (c. 1509). Morality plays were "attempts to project moral conflict onto a stage" (Speirs 1959: 59), and focused on "man as an object of contention" between the lower and the higher qualities of the soul (Sampson and Churchill 1972: 201). In the typical Morality Play, characters are personifications of "impulses, moods, attitudes and states of mind, qualities, virtues and vices, physical and mental conditions such as old age and youth" (Speirs 1954: 59).

<sup>36</sup> E.g. Greed, Temptation, Wisdom, Perseverance.

- the *origins* of life and natural phenomena;
- the *principles* of human existence, social organization, moral behavior;
- the *conflicts* between worldly or spiritual powers, etc.

But unlike the dramatic script of the *source story*, which always achieves some degree of explicitness, the more symbolic *thematic* or *metaphysical script* of the *target story* may be more covert.

Special mention deserves to be made of *allegory* in the Middle Ages. As Speirs notes in his survey of English medieval verse, “allegory was the established medieval method of visualizing or imagining the inner workings of the mind.” (1959: 59). Allegory was a cultural *mode of understanding*, “the way the medieval mind characteristically worked”, as it tried to make “the barely intelligible” *visible* or *imaginable* (25). Allegory thus defined, was first and foremost a *frame of mind*, a *representational strategy* that led to the production of art forms in which some “figurative narrative” was told to convey some more abstract “moral meaning” (Drabble and Stringer 1987: 10). What might be termed the *allegorical spirit* was the deep *cognitive foundation* of *allegorical modes of depiction, expression or dramatization*.

The “medieval mind” showed a particular fondness for *miracle* and *mystery plays*. Those popular reenactments of key biblical stories or salient episodes in the lives of saints were meant to *represent* – i.e. make “present” again, to the mind and to the senses – moments of high moral and spiritual significance. The stories – which eventually “got out of hand” (Speirs 1959: 47) – were extraordinary conceptual mixes, *compressing* spatial, temporal and causal relations into a single dramatic space, *blending* respectful biblical remembrance, tragic accounts of human destiny<sup>37</sup> with myth, legend, pagan ritual, buffoonery and satiric reference to the surrounding social context.

And just as mass was the symbolic reenactment of Christ’s sacrifice on the Cross, culminating on Palm Sunday and Good Friday (when readings of the Passion turned into actual “liturgical drama”), so the *mystery cycles* traditionally performed in June during the Corpus Christi processions were reenactments of the central mystical events connected to the birth, death and resurrection of Christ<sup>38</sup>.

On a broader cultural basis, the story of Christ born, growing, living and dying is the story that shapes the Christian Year and much of our calendar year. Even if Gospel stories are no longer perceived as major cultural narratives in modern Western society, the narrative construal of time is still very much with us.

---

<sup>37</sup> “Lord, they are well off who are dead and gone, For they do not suffer vicissitudes. Here is much unhappiness, and it lasts long, Now in sickness, now in health, now in wet, now in blast, Now in care, Now in comfort again, Now in fair weather, now in rain, Now in heart full of gladness, And after of sorrow. Thus goes this world, I say, on every side....” Opening of *The Townley First Shepherds’ Play*, quoted in Speirs (1959: 437). The play was composed by an anonymous writer (“The Wakefield Master”), and based on a large portion of the traditional (Mystery) Cycle.

<sup>38</sup> The coming of a savior, Jesus, is announced. Then Jesus Christ is born, grows up, teaches, is tried and crucified. He resurrects from the Dead, appears to the apostles, ascends into Heaven and eventually sends his spirit. Corresponding religious festivals (e.g. Christmas, Easter, Whitsuntide) and special liturgical times (e.g. Advent, Lent) are *story*-based. Story and liturgy are never so closely integrated as during Holy Week, which rests entirely on the central Passion narrative.

Indeed, it is important to remember that our experience of time is essentially *narrative*. Although the established *calendar model* may look like a strict measuring system that divides time into sequences of years, months, weeks and days, *astronomy* plays a minor role in everyday human cognition, compared to *myth, ritual and life-cycle stories*.

- a. Many of the names given to days and months refer to *deities* or *ritual activities*<sup>39</sup>.
- b. Seasons – from French *seson*, related to Latin *serere* “to sow” – are obviously related to agricultural activity and nature’s fertility cycle. *Spring* and *fall* conjure up *stories* of growth and decay. More generally, *narrative models* are used to construe the cycle of seasons. In the *journey model*, for example, seasons are described as animate actors that “come” and “go.” “Approaching” seasons are “ushered in” by typical cultural events or natural phenomena, “set in” and are eventually “driven away” by the season that “comes” next. In the cyclical *rebirth model*, seasons come to life, mature, decay and die. They “return” (resurrect, are borne again) the following year.
- c. The sun’s daily cycle is construed narratively, via the perception-based story of the sun “rising”, “shining” and “setting”.

Other stories structure our experience of time. Thus, the academic year is first and foremost the story of schools “opening” and “closing”; terms and holidays “beginning” and “ending”. This is quite striking in French culture where *la rentrée*<sup>40</sup> and *la sortie*<sup>41</sup> are cognitively salient narratives. Politicians, artists, fashion designers, and more generally professional people returning to work after a long break are all involved in a *rentrée* of some kind<sup>42</sup>.

Among illuminating cases of *parabolic thinking* found in literature are also *beast fables*, which epitomize what Johnson (1993) so aptly calls *imaginative rationality*. For beast fables require a shift from the simple *projection* model invoked so far, to the more sophisticated *blending* model described by Fauconnier and Turner<sup>43</sup>.

Beast fables are *improbable stories* that teach *sensible moral lessons*, extraordinary products of “the literary mind” that reveal the ordinary workings of “the fundamental mind” (Turner 1996: v). The fables are obtained by *mixing* rather than *transferring* stories – that is, by *blending* identities, abilities and roles. The result is a hybrid, imaginary *mental space*, peopled with its own hybrid, fancy creatures, following their own hybrid motivations for action. Thus, in La Fontaine’s “Cicada and the ant” (*La Cigale et la Fourmi*), a hard-working *talking ant* flatly refuses to lend any food to an improvident *talking cicada*. The *blended dramatic and moral space*, in which animals negotiate

<sup>39</sup> Thus, *Tuesday* is the day of *Tiw*, *Thursday* is *Thor*’s day, *Friday* is *Freya*’s day; *January* the month of *Janus*, February the month of *purgation* (Latin *februum*), *March* the month of *Mars*, *May* the month of *Maia*, etc.

<sup>40</sup> Literally “re-entry”, the moment when pupils are seen “entering” school buildings again. *La rentrée* is the (institutionalized) time when (all) schools go back.

<sup>41</sup> Literally “exit”, the time when schools break up.

<sup>42</sup> *Faire sa rentrée*, literally to “make one’s return” is the standard phrase.

<sup>43</sup> See Turner 1996, Fauconnier 1997, Fauconnier and Turner 2002.



their specific animal needs, using human verbal language and reasoning, develops its “own logic” (Turner 1996: 61), while remaining “hooked” to the original *input spaces* that have contributed actors and conceptual structure – respectively the animal world and the human world.

La Fontaine<sup>44</sup> – who was later imitated by John Gay<sup>45</sup> – built on many of Aesop’s stories<sup>46</sup>, praising the author’s choice of characters and topics, as well as his elegant concision (“*élégance laconique*”). La Fontaine’s own animal tales (*contes*) were all written with a clear motive of instruction: “*Je me sers des animaux pour instruire les hommes*”<sup>47</sup>. The imaginary events related in the “tales” (*contes*) were intended to “please” (*plaire*) and “edify” (*instruire*). Narrative imagining was purposefully used by the poet and moralist as a “crafty device” (*feinte*) to philosophise about human character while avoiding the “dullness” (*ennui*) of “bare moral instruction” (*Une Morale nue*):

*Les Fables ne sont pas ce qu’elles semblent être  
Le plus simple animal nous y tient lieu de maître.  
Une Morale nue apporte de l’ennui :  
Un conte fait passer le précepte avec lui.  
En ces sortes de feinte il faut instruire et plaire,  
Et conter pour conter me semble peu d’affaire.  
Fables, Livre Sixième, 1. « Le Pâtre et le Lion »*

The talking animals of Lafontaine’s beast fables are perfect illustrations of *parabolic blending*<sup>48</sup>. Two stories, with two sets of characters belonging to two different “worlds” *blend* into a single narrative, governed by its own emergent logic. A *blended space* is thus set up in which a gaunt wolf can *quite naturally* interact with a fat house dog and exchange views about diets and destinies, as in *Le Loup et le Chien*<sup>49</sup>. Each protagonist in the fable is a unique *mix* of human and animal properties. The talking wolf is zoomorphic enough to be featured as a wild beast living in the woods, preying on weaker animals, and anthropomorphic enough to converse in French with the “fat and polite” (*gras et poli*) house dog.

In the *imaginative blended space* that is constructed, both wolf and dog enjoy the totally unrealistic status of *literate beasts*, endowed with true-to-life animal

---

<sup>44</sup> The French poet Jean de La Fontaine (1621-1695) is mostly remembered for his fables. Popular animal stories include *La Cigale et la Fourmi* (The Cicada and the Ant), *Le Loup et l’Agneau* (The Wolf and the Lamb), *Le Corbeau et le Renard* (The Crow and the Fox), *Le Lièvre et la Tortue* (The Hare and the Tortoise), *Le Lion et le Rat* (The Lion and the Rat).

<sup>45</sup> John Gay (1685-1732) brought out his *Fables* in 1727. A second volume was posthumously published in 1738.

<sup>46</sup> The name of Aesop (620?-564? BC) – probably a legendary figure to whom tradition attributes a wide stock of Greek fables – is associated with the *beast fable* – or *aesopian / aesopic fable* – in which animals are given human characters and chiefly used to satirize human failings.

<sup>47</sup> I use animals to instruct men

<sup>48</sup> “Talking animals are a conceptual blend. (...) Talking animals, seemingly so trivial, are created through a general and central parabolic activity of the everyday mind – blending.” (Turner 1996: 58)

<sup>49</sup> “The Wolf and the Dog.” In this fable, a starving wolf comes upon a well-fed dog. The wolf agrees to follow the dog into town and “work” for his master. But on the way, the envious wolf notices that hair is missing on the dog’s neck and realizes that his fortunate cousin normally wears a collar: “*Attaché? dit le loup; vous ne courrez donc pas où vous voulez?*” (Chained up? Is that it? You can’t go about as you please?). Appalled by the discovery, the distraught wolf runs off.

instincts *and* improbable human capacities. Such is the conceptual and dramatic *integration* of the two *input spaces* that a thoroughly impossible situation is made to appear credible and “objective”<sup>50</sup>, as well as “illuminating”<sup>51</sup>.

The blending mechanism detected in *beast fables* also applies to *Gospel parables* and, more extensively, to all linguistic expressions of parabolic thinking. Two or more “input stories” merge into a *single blended narrative*, as when Christ sends his disciples out into the world as “lambs in the midst of wolves” (Luke 10.3) or when ordinary speakers say that “they can see trouble ahead” :

---

<sup>50</sup> “After a blend has been constructed, the correspondences – the identities, the similarities, the analogies – seem to be objectively part of what we are considering, not something we have constructed mentally.” (Fauconnier & Turner 2002: 19)

<sup>51</sup> “Blending is a dynamic activity. It connects input spaces; it projects partial structure from input spaces to the blend, creating an imaginative blended space that, however odd or even impossible, is nonetheless connected to its inputs and can illuminate those inputs.” (Turner 1996: 83)

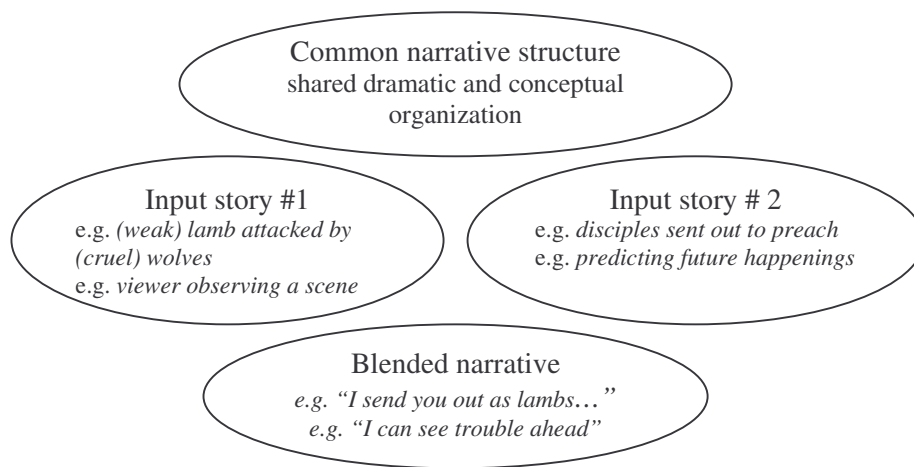


Figure 1: parable as blended narrative

The mental (and dramatic) space imaginatively constructed in the blended narrative is the locus of *conceptual integration*, a complex process involving “matching”, “selective projection” (from the contributing stories), “composition”, “elaboration”, “emergent meaning” and “compression” (Fauconnier & Turner 2002: 345). Compression<sup>52</sup> is an essential aspect of blending. It applies to all “vital relations”<sup>53</sup>, in particular time and space relations, as well as cause and effect. Fables, parables, proverbs are thus “compressed blends” (Fauconnier & Turner 2002: 312), compact cognitive packets that cut out, condense and simplify experience, while providing a striking sense of transparency and wholeness.

### 3. The daily workings of parabolic thinking

*Projection* and *blending*<sup>54</sup> are “some of our most basic and common mental abilities” (Fauconnier & Turner 2002: 18). So is the *narrative* organization of experience. *Parable*, which combines those three fundamental cognitive mechanisms, is a powerful conceptualizing and representational strategy that “has the widest utility in the everyday mind.” (Turner 1996: 7). It is “a literary capacity indispensable to human cognition generally” (5). Yet, outside marked moral, mythical or religious contexts, parabolic thinking remains an unconscious form of *narrative imagining*, a hidden hand<sup>55</sup> in the cognitive laboratory of human invention.

<sup>52</sup> For a detailed discussion of “compression” see Fauconnier & Turner (2002:312-324)

<sup>53</sup> “We call all-important conceptual relations ‘vital relations’. (Fauconnier & Turner 2002: 92) E.g. “Change, Identity, Time, Space, Cause-Effect, Part-Whole, Representation, Role, Analogy, Disanalogy, Property, Similarity, Category, Intentionality, Uniqueness.” (111)

<sup>54</sup> “[B]lending produces ads in magazines, hyperbolic geometry, grammatical constructions, counterfactual arguments, cause-effect compressions, literary allegories, computer interface designs, and many other inventions.”(Fauconnier & Turner 2002: 110)

<sup>55</sup> “Our unconscious conceptual system functions like a ‘hidden hand’ that shapes how we conceptualize all aspects of our experience” (Lakoff & Johnson 1999: 13).

The aim of this new section is to show that parable is indeed a basic mental tool, especially in biology and medical science, where anthropomorphic conceptions of bacteria and viruses invite socio-cultural narratives.

### 3.1. The “virus infection” stories<sup>56</sup>

*Viral and bacterial infections* are central members of the infectious diseases category. Viruses are the smallest form of life and, unlike bacteria, can only reproduce in the living cells they infect. In microbiological terms, viruses show “host specificity,” meaning that a certain virus will only be able to replicate itself within a certain species or group of species. The center or “core” of a virus contains the genetic material necessary for it to survive and replicate itself within host cells. But more relevant to our purpose than biological specifications are the embedded or interrelated *stories* typically used to conceptualize biological virus infections, in particular:

- the central *war and invasion story*: a virus is construed as an assailant; infection as “attack” followed by “invasion” of the “target cells”; immunization as protection; the production of antibodies as organized defense, etc. It is interesting to note that in the world of computer hacking, this traditional *war scenario* is realized as the more modern *terrorist attack story*. “Hard disks” are “exposed” to the “threats”, “attacks” and “deadly actions” of viruses.
- the *foreign detection story*: the body’s immune system recognizes some of the protein molecules in the virus as “foreign” (and “attacks” the virus by producing antibodies against them). This story is adapted to the computer world as the *virus scan story*, performed by “anti-virus software”, loaded with updated “virus definitions”.
- the *fertility story*: technically, viruses “copy” or “replicate” themselves. Although the process tends to be described in sexless, mechanistic fashion, the story of “reproduction” is clearly part of *backstage cognition*<sup>57</sup>, both in the microbiological and the computer domains. Replication – the process by which a virus “spawns” or “makes copies of itself” – is “one of the major criteria separating viruses from other computer programs.”
- the *friendly home (or environment) story*: in microbiological terms a “host” is an organism in which a virus can copy itself. The “host cell” is construed as the virus’s fixed abode, elected home or favourite breeding ground.
- the *recovery (or get better) story*: the body’s immune system naturally and efficiently copes with most virus infections. Laboratory-made *vaccines* have been developed to protect humans from serious viral diseases. Interestingly, this story does not transfer well to the computer world. Although certain forms of “vaccination” can be carried out, the

---

<sup>56</sup> All terms and definitions related to virus infections are borrowed from online glossaries and articles: *National Foundation of Infectious Diseases* ([www.nfid.org](http://www.nfid.org)), *McAfee Security* ([www.mcafee.com](http://www.mcafee.com)) and *BBC International* recommendations on “How to avoid computer viruses” ([www.bbc.co.uk/dna/h2g2/A354638](http://www.bbc.co.uk/dna/h2g2/A354638)).

<sup>57</sup> “Backstage cognition” is all the “imaginative work (...) invisible to us and taken for granted” (Fauconnier & Turner 2002: 23).

electronic “immunization” of systems is not performed. Computer systems have no natural, self-regulating immune systems. As a result, there are no *self-recovery scripts* in the *restoration story* of damaged files. (The latter is construed as a voluntary “cleaning”, “disinfection” or “fixing” episode, performed by users, with the assistance of security experts).

The above list is not complete, but long enough to establish the *narrative construal* of biological viruses and outline some common extensions to computer viruses. “Virus attacks” are *microbiological stories*, understood via the *common socio-physical stories* of war, fertility, home, etc. Applied to the world of computer programming, the complex *virus reproduction and infection story* functions as a compressed and simplified *input story*, which is selectively *blended* with another input story – the story of malignant manmade programs capable of attaching themselves to files, replicate themselves and damage entire computer systems. The projection of the two input stories into a single, blended narrative yields *the computer virus infection story* that all office workers live by.

Technically, a computer virus is a malignant program purposefully created by programmers. The “malicious piece of code” is designed to damage a system or the data it contains, compromise security and confidentiality, prevent the computer from being used in its normal manner. A virus can be “malignant” enough to bog down an entire computer system or even destroy it utterly. The rogue program has a “source code” that “virus technicians” must identify in order to devise the “fix tools” that will “remove” or “eradicate” it. The process is known as “disinfection” or “cleaning”. It is interesting to note that “repairing” damaged computer files or disks is narratively construed via different stories: *disinfecting* (a contaminated area), *cleaning* (something), *removing* (some unwanted item), *repairing* (some broken object). Matters can be made more complex and eerie, when the virus has been programmed to “resurrect itself.” A creepier story is then added to the blend.

Computer viruses seem to “spread”, “propagate”, “infect” and “mutate” indefinitely, just as biological viruses do<sup>58</sup>. Central “virus types” include “mutating viruses”, “macro viruses”, “armoured viruses”, “zoo viruses”. The “damage” they are capable of inflicting to computer systems can be “lethal”. Their destructiveness rivals that of other “parasitic” or “malicious” computer programs that invoke different narrative frames, such as “worms” and “Trojan horses.” Although “host specificity” is not mentioned as such, computer viruses typically attach themselves to specific (program) files. File types that play host to computer viruses – like .EXE, .COM, .BAT, .ZIP, .VBS, .DOC, .XLS – act as “common carriers” capable of “passing the virus along.”

As the specialized vocabulary of virus “attacks” and “infections” suggests, viruses are partly construed as assailants – or rather *terrorists* – capable of

---

<sup>58</sup> The *contagion script* is an important component of the computer virus story. Many viruses “propagate” or “spread” through email address books and “infect” other systems by sending themselves out to personal email accounts, contacts and friends, who end up “contracting the virus.” Infection and removal (disinfection) methods may carry biological names but denote thoroughly different procedures: “processing a malignant code” (infection); repair, deletion or restoration (disinfection).

“carrying major Net attacks” by “building large network of slave machines” and “exploiting vulnerabilities in security systems.” And just as counter-terrorist units are usually unable to prevent major terrorist attacks or disarm terrorist networks, “security experts” are rarely able to prevent damage being done. But unlike special security forces that can launch pre-emptive strikes or engage in counterattacks, “virus technologists” are peaceful criminal investigators. Norton and McAfee teams do not pose (or act) as armed peacekeepers, engaged in the dismemberment of “the cybercrime community” and the inactivation of “attack networks.” The best they can do is issue special “warnings”; devise “firewalls”; offer “virus removal tools” that will “repair” the “harm” done to computers; sell “antidotes”<sup>59</sup> or “vaccines” and eventually suggest methods of “safe computing” that will allow users to “protect themselves” and “keep virus-free”. (The discourse of “safe computing” is strongly reminiscent of the “safe sex” campaigns launched after the outbreak of Aids).

The *computer virus infection story* just outlined is the *blended narrative* that allows us to *understand* how a malignant piece of code might damage computer systems and spread across networks. But it is much more than that: it is the original *creative script* that has shaped the nature and destiny of computer viruses ever since they were invented. Computer viruses attack and replicate the way they do because they were initially *conceived* as viruses. The same holds for “worms” and “Trojans”, which have specific ways of disabling computers, based on original biological or mythical scripts.

Lastly, it should be noted that the *cognitive efficiency* of the conceptual integration network created by the computer virus blend rests on the *shared conceptual and dramatic structure* originally connecting the *input stories*:

- Input story # 1: “a microbiological entity that infects or contaminates a healthy organism and threatens it with destruction”
- Input story # 2: “a manmade program or piece of code that causes a negative event in a computer system”

The common structural properties shared by the *biological virus story* and the *malignant computer program story* are aptly defined by Fauconnier and Turner (2002):

The element is present, but unwanted; it comes in, or is put in, from the outside. It does not naturally belong.  
The element is able to replicate; new copies of it appear that have the same undesirable properties as the original.  
The element disrupts the original functioning of the system.  
The element is harmful to the system and, hence, to its users. (275)

In other words, the presence of some rational *common denominator* is indispensable for the imaginative blending process to take place.

---

<sup>59</sup> The imaginative world of myth and magic is never far, as “firewalls” and “antidotes” attest. These clearly refer to anthropologically meaningful cultural narratives.



### 3.2. Trial by medical jury: oncology as criminal investigation followed by court proceedings

In “The Role of Imagery in Specialized Communication” (2003), Pamela Faber and Carlos Márquez Linares claim that the *stories of armed conflict* which are routinely used to frame “the fight against cancer” in medical oncology texts are less central and meaningful than other narratives, such as the *police investigation* and the *trial stories*<sup>60</sup>:

[T]he frequently cited arm conflict [story] is not the only one in medicine, nor is it necessarily the most important, especially in highly specialized research articles. A more frequent [story] in this type of discourse is the police investigation [scenario]. In this case the doctor is the police detective who (...) rounds up the usual suspects. This kind of sleuthing activity activates the *police investigation* frame as well as a subsequent *courtroom* frame within the context of which the culprit is brought to trial.”

The *police investigation story* is essential in providing the four participant roles and basic *investigation script* present in the *oncological inquiry blend*: detective / doctor; culprit / disease; evidence / data; conviction / diagnosis.

The wide body of linguistic evidence produced by Faber and Márquez shows that medical research is indeed construed as a kind of “sleuthing business” requiring “detective-like laboratory skill.” The detective is both an *agent* and an *experienter*, who must “solve a mystery.” “Clues” are provided by abnormalities and by chemical or genomic “footprinting.” The doctor may find a “suspect” (e.g. “suspect lymph nodes”) who is put under “surveillance.” If “circumstantial evidence” is found, the “culprit” is “accused” and “brought to trial.”

Once the investigation phase is over, the trial may start. As the trial begins, “the doctor changes roles.” He is no longer “a detective”, but “a lawyer who ‘interrogates’ the witness (affected body-part) by means of a diagnostic instrument.”

The “testimony” of the “witness” may or may not “implicate” the accused (...) After the testimony of the witnesses and the presentation of “evidence” (...) a “verdict” is emitted by the jury (...) The accused may be “exonerated” or declared to be the culprit and “incriminated.”

Faber and Márquez note that “what licenses the whole frame is the fact that inanimate entities such as germs, cells, antibodies, etc. are conceptualized as animate ones.”

Oncology texts basically focus on cells. Depending on whether the cells are malignant or healthy, they may take the role of agent or patient. Since these are conceptual roles generally ascribed to animate entities, this is conducive to personification. Consequently, at different levels, cells acquire human roles as well as the prototypical characteristics of these roles. This is particularly true of *genes*, which can have general conceptual roles such as *effector*, *activator*, or *receptor*.

---

<sup>60</sup> To suit the present purpose, the original terms used by the authors – “metaphor”, “metaphoric”, etc. – have been replaced by “story”, “script” or “narrative”. The shift in “dramatic emphasis” does not alter Faber and Márquez Linares’s cognitive account.

More importantly, they suggest that the specialized language, concepts and methodology of scientific inquiry owe more to cultural narratives than is commonly assumed. The *criminal investigation* and *court trial* stories detailed in their paper are proof enough that *narrative imagining* and, more specifically, *parabolic blending* are essential dimensions of construal in science.

### 3.3. Parabolic projection and grammar

Grammar makes abundant use of small *spatial* and *perceptual stories* to structure key temporal, aspectual, modal and causal concepts. Grammar is deeply *poetic* (Lapaire 2002: 25) and *dramatic*.

Common stories of *body action* and *perception* found in grammar systems include *journey stories*, *object-production stories* and *viewing scenes* (Lapaire 2002, 2004a, 2004b). Each story profiles a particular body part and type of sensory-motor activity. The following examples may be given:

- a. *Legs / feet. Walking.* In the *successful journey story* coded by the French aspectual idioms *arriver à*, *parvenir à*<sup>61</sup> doers are construed as *travelers* moving along an *action path*<sup>62</sup> and their achievements as *destinations reached*.
  - (1) *J'y suis arrivé!* (“I succeeded”, “I made it”; literally “I got there”, “I arrived in that place”).
  - (2) *Je n'arrive pas à lire ton écriture* (“I can't read your hand”).
  - (3) *Il est parvenu à ouvrir la fenêtre.* (“He managed to open the window”)
  - (4) *Je ne parviens pas à trouver la solution.* (“I can't find the answer”).

“Thematic roles” – like « agent », « experiencer », “cognizer” – are subsumed under a single narrative role: that of the fortunate (or unfortunate) “traveller”, encountering obstacles on the way to a desired action-location.

The predictive idioms known as “*go-futures*” illustrate a subvariety of journey story: the *mental journey* to an envisaged event. The French *aller* + infinitive construction (*Vous allez tomber*) and the English *be going to* construction (*You are going to fall*) involve “subjective motion” along an imaginary “temporal path” to the “infinitival event” (Langacker 2000: 302-04).

- b. *Hands. Physical manipulation.* In the *object-production story* “things done” are construed as “things made”, and finished actions as “finished products” (with “no part missing”). The “workshop model” for human

<sup>61</sup> Literally “to arrive”, “to come to a place”. When used aspectually: “to manage to do sth”, “to succeed in doing sth.”

<sup>62</sup> “ACTIONS ARE MOTIONS ALONG PATHS from one location (= state) to another state-location. (...) STATES ARE LOCATIONS along such metaphorical action-paths (...) CHANGES ARE MOVEMENTS from one state-location to another. (...) PURPOSES ARE DESTINATIONS toward which we move.” (Johnson 1997: 37).

undertakings has performers cast in the role of creators of “artefacts” (Lapaire 2004a). It is extremely productive in French grammar:

(5) *C'est chose faite!* (« It's done ! »; literally « It's a thing made »)

(6) *Voyons, fais quelque chose !* (« Why don't you do something ! »; literally “Please, make something!”)

The model is relevant to English grammar too. The object-production story is subliminally told in some causal and aspectual *make*-constructions:

(7) *She makes me cry.* (= “She causes me to cry”)

(8) *We've made it!* (= “We've succeeded”)

- c. *Eyes. Observation.* Prediction and epistemic certainty are often construed in visual terms. In the common *epistemic viewing scene*, cognizers are cast in the role of observers scanning the horizon. Perfect knowledge is clear vision; prediction is foresight; predictable or likely events are visible *things* lying “out there” in the conceivable world / “foreseeable future” (Lapaire 2004b).

(9) *Just try to picture the future!*

(10) *I can see this happening quite soon.*

(11) *Analysts foresee that oil prices will rise sharply.*

The projection of story structure onto grammatical form and meaning allows *narrative compression* and *simplification* to take place. Evasive thematic roles, complex aspectual configurations, subtle causal links are reduced to fixed participant roles (“traveler”, “creator”, “viewer”) and purposes (“reaching one's destination”, “producing an object”, “seeing something clearly”) in generic-level scripts.

### Concluding remarks

Humans are *imaginative*<sup>63</sup> *storytelling animals*. *Narrative* imposes dramatic organization on target configurations and plays a vital role in the *cognitive fluidity* of meanings (Fauconnier & Turner 2002: 174). More generally, the prevalence of parabolic thinking in human language and cognition supports Turner's controversial claim that “the literary mind is the fundamental mind” (1996: v).

### References

- Butler, Octavia. 1993. *Parable of the Sower*. Warner Books.  
 Butler, Octavia. 1998. *Parable of the Talents*. Seven Stories Press.  
 Croft, William and D. Alan Cruse. 2004. *Cognitive Linguistics*. Cambridge: Cambridge University Press.  
 Donald, Merlin. 1991. *Origins of the Modern Mind. Three stages in the evolution of culture and cognition*. Cambridge, Mass. : Harvard University Press.

<sup>63</sup> “Humans are fundamentally imaginative creatures whose understanding of experience is built up with the imaginative materials of cognition.” (Johnson 1997: 3)

- Faber, Pamela and Carlos Márquez Linares. 2003. Paper given at the international conference “Imagery in Language, University of Lodz, Poland. A transcript may be obtained by contacting: pfaber@ugra.es.
- Fauconnier, Gilles. 1997. *Mappings in Thought and Language*. Cambridge : Cambridge University Press.
- Fauconnier, Gilles and Eve Sweetser, Editors. 1996. *Spaces, Worlds and Grammar*. Chicago: The University of Chicago Press.
- Fauconnier, Gilles and Mark Turner. 2002. *The Way We Think*. New York: Basic Books.
- Frye, Northrop. 1973 [1957]. *Anatomy of Criticism*. Princeton New Jersey: Princeton University Press
- Guillaume, Gustave. 1969. *Langage et science du langage*. Paris : Librairie A.G. Nizet.
- Johnson, Mark. 1993. *Moral Imagination*. Chicago: The University of Chicago Press.
- Lakoff, G. 1993. “The Contemporary Theory of Metaphor.” In A. Ortony, editor, *Metaphor and Thought*. 2<sup>nd</sup> edition, 202-251. Cambridge: Cambridge University Press.
- Lakoff, George and Rafael E. Núñez. 2000. *Where Mathematics comes from*. New York : Basic Books.
- Lapaire, Jean-Rémi. 2002. « The conceptual structure of events : the go-, make and get-/give-/have-scenarios. » In *Anglophonia. French Journal of English Studies*. Issue n° 12. Toulouse: Presses Universitaires du Mirail.
- Lapaire, Jean-Rémi. 2004a. “Act, fact and artefact. The workshop model for action and causation.” In *Linguagem, Cultura e Cognição: Estudos de Linguística Cognitiva*. Augusto Soares da Silva (Ed.). Coimbra: Almedina, 2004.
- Lapaire, Jean-Rémi. 2004b. “Imagistic dimensions of futurity.” In *Imagery in Language*. Barbara Lewandowska-Tomaszyck (Ed.) *Lódź Studies in Language*. Volume 10. Frankfurt/M : Peter Lang, 2004.
- David J. Lu. 1974. *Sources of Japanese History*, Vol 1. New York: McGraw-Hill.
- MacIntyre, Alasdair. 1984. *After Virtue*. Notre Dame, Indiana: University of Notre Dame Press.
- Ricoeur, Paul. 1984. *Time and Narrative*. Chicago: University of Chicago Press.
- Sampson, George. 1972 [1941]. *The Concise Cambridge History of English Literature*. Third Edition. Revised throughout by R.C. Churchill. Cambridge University Press: Cambridge.
- Schank, Roger C. and Robert P. Abelson. 1977. *Scripts, plans, goals and understanding : An Inquiry into Human Knowledge Structures*. Hillside, N.J.: Erlbaum.
- Speirs, John. 1959. “A Survey of Medieval Verse.” in *The Pelican Guide to English Literature* (Ed. Boris Ford). Harmondsworth : Penguin Books.
- Tannen, Deborah 1993. “What’s in a Frame? Surface evidence for underlying expectations” in *Framing in Discourse*. New York : Oxford University Press.
- Tannen, Deborah and Cynthia Wallat. 1993. “Interactive Frames and Knowledge Schemas in Interaction: Examples from a Medical

- Examination / Interview in *Framing in Discourse*. Edited by D. Tannen. New York : Oxford University Press.
- Turner, Mark. 1991. *Reading Minds. The Study of English in the Age of Cognitive Science*. Princeton N.J.: Princeton University Press.
- Turner, Mark. 1996. *The Literary Mind*. New York : Oxford University Press.
- Wierzbicka, Anna. 2001. *What Did Jesus Mean? Explaining the Sermon on the Mount and the Parables in Simple and Universal Human Concepts*. Oxford: Oxford University Press.