

Experiments in Pattern Recognition

Case study: The Nutcracker

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Abstract:

Fairy tales are patterned narratives and they are a good example of exemplifying the way pattern recognition works. Pattern recognition is based on prior knowledge and experience, otherwise pattern identification does not occur. Fairy tales are considered to have an original tale against which variants are assessed, and pattern recognition processed. We applied the pattern recognition on the case of the Nutcracker: The nutcracker figure is at the centre of a cultural narrative of migration: from E.T.A. Hoffmann's original story (1816) to Alexandre Dumas the Elder's adaptation (1844) and from here to the libretto that served Peter Ilyich Tchaikovsky's score of the homonymous ballet, first performed in St. Petersburg, at the Mariinsky Theatre, in 1892 and based on a libretto written by Marius Petipa and Lev Ivanov. We are going to take a look at the similarities and contrasts that show through the interdisciplinary grid applied on these famous art objects.

Keywords: fairy tales, pattern recognition, the nutcracker, E.T.. Hoffmann, Alexandre Dumas the Elder, Tchaikovsky, hybridity

Features of fairy tale pattern:

a) Wide circulation of motifs, topoi, characters.

Romantic writers are reputed for their commitment to originality, but working in a genre – the fairy tale – Hoffmann felt the need to acknowledge the convention through a laying in the abyss. In his story, Marie, the protagonist, is listening to her mother's reading of a story, *Les quatre Facardins*, by Count Antoine Hamilton, published in 1730 and probably known to Hoffmann from *Feenmährchen des Grafen Hamilton* (Fairytale of Count Hamilton) (Gotha, 1790) in volume 2 of Friedrich Justin Bertuch's *Blaue Bibliothek aller Nationen* (Blue Library of all the Nations) (Blamires 2009: 230). We can see that the fairy tale was perceived by its early audience as a member of a **world library of the nations**, confirming identity upon the peoples contributing to it. Hamilton himself had acknowledged, through intertextual practices, his debt to the *Arabian Nights*, wherefrom he borrowed narrative devices, such as the interrupted narrative, the audience inside the story, Oriental landscapes, etc. In his turn, Hoffmann employs these devices, adding some of his own in the spirit of the new structure of feeling associated with romanticism: the identity of

subject and object (the mind becoming the object of its own observation, as in Hegel's *Phenomenology of the Spirit*, which characterized the process of cognition according to German idealism, is underwriting the laying in the abyss of the main plot and the doubling of names and identities. Drosselmeier, a corrupted version of Almighty God, shows up as wizard and clockmaker (his cousin of the same name) also in the embedded narrative, "Fairytale of the Hard Nut". He addresses his readers both by his character's names and his own: "I turn to you yourself, my dear reader or listener Fritz – Theodor [...]" Fritz is one of the protagonists, while the other two names are the author's own. Drosselmeier tells Marie a story about another Drosselmeier and his nephew, which turns out to have anticipated his own introduction of his real-life nephew to the Stahlbaums, who will – allegorically – fulfil Marie's childish dreams about a prince taking her away to the fairy land.

As fairy tales are taken from windows open towards the peoples of the world, the confectionary utopia of the embedded story brings together sundry ethnicities:

The city that they reach is Konfektburg, the Town of Sweets, where there are handsomely dressed ladies and gentlemen, Armenians and Greeks, Jews and Tyroleans, officers, soldiers, clergymen, shepherds and clowns and every kind of people in the world. Marie may have known them in toy form, but in specifically naming the Armenians, Greeks, Jews and Tyroleans Hoffmann is adverting to contemporary troubles. Both the Armenians and the Greeks were attempting to establish their independence of the Ottoman Empire, while the Tyrolese, under the leadership of Andreas Hofer, had lost their struggle for independence with Hofer's death in 1810. But Marie is dreaming of a peaceable kingdom that exists only in fairytales or the realms of utopian desire. Behind the tumultuous diversity Marie sees is the *Konditor*, the confectioner who is the founder of everything – 'an unknown, but quite uncanny power that people believe can make what it wants out of humankind'. (Blamires 2009: 236).

Blamires is probably right in assigning a political meaning to the story based upon the historical context basically influenced by the ideas of the French Revolution, such as the nations' emancipation and the fall of the ancient autocratic regimes and empires (See Count Volney's *Ruins, or, Meditations upon the Revolutions of Empires* (1791). The story reflects upon commonplaces of the time: the rivalry between Asian empires and churches (Brahmins, Muslims), as well as China's politics of closed doors under the Ming and Qing dynasties. The hard to crack nut has a name written in Chinese letters: *krakanut*. In the Konfektburg (Town of Sweets), there is a pageant and a confrontation which might have been fatal of the warrior Asian races led by sultans, moguls, and surrounded by slaves, but by mixing up with clowns of the *commedia dell'arte*, and by having their fates determined by a sweets cook, their formidable power is demystified. The very hero in the title, the Nutcracker, appears to be surrounded by subversive connotations, as these tools, at that time, were often carved in the image of official persons as a form of mockery. In this respect, Hoffmann's nutcracker anticipates Nietzsche's hammer used to break down idols (*Götzen-Dämmerung*).

Writing in mid-nineteenth century, Dumas had caught much of the spirit of positivism, with its emphasis upon family and society prevailing over the individual – a radical change from romanticism which had absolutized the self and inner life. Whereas in Hoffmann, Miss Trutchen is an older doll, animated in Marie's eyes, who speaks about it as being clumsy, falling repeatedly to the floor and defiling her garments, in Dumas the name refers to Marie's governess – a social class that needed to be represented, as its role in middle-class children's lives was considerable.

The historical context changes in almost all these respects in the late nineteenth century when Tchaikovsky composed the music of his ballet. Japan and China had been forced to open their harbours to western merchants, their youngsters were going to study in the west, their artists were seeking enlightenment in western aesthetics and philosophy, whereas the *fin-de-siècle* symbolist and decadent artists were seeking

inspiration in Oriental art, especially painted wood engraving and Japanese Noh plays. Post romanticism was opening vistas broadening into modernism and postmodernism world theatre of signs of museum space, in which traditional symbols have been emptied out of content and reduced to emblems and signposts of the tourism industry or of the consumer society. A mall offering a variety of national cooking traditions is perceived almost in the same way as some global art expositions.

It is also true that the change in the language used by artists – words, music, bodily movement – was one more factor producing differences between the artefacts we are discussing. In the story, Hoffmann can focus on the heroine's feelings, perceptions, and thoughts; in the ballet world, the whole scene has to be had in mind with bodies displayed in significant postures. The real world and the other worldly have to be placed in logical relations in time and space on the stage: Marie/ Clara is shrinking to the dimensions of the nutcracker, while the Christmas fir tree is getting bigger, whereas Hoffmann is free to juxtapose them. The score has moments of virtuosity, and a set of genre scenes and figures.

Another difference is brought about by the transition from a society cherishing religious rituals (Hoffmann had a real life experience in visiting the children of his friends, the Hitzig in Berlin, and a cultural representation of what passed for a Christmas ritual/ festivity in "J. A. C. Löhr's *Der Weihnachtsabend in der Familie Thalberg* (Christmas Eve in the Thalberg Family), Leipzig, 1805" (Blamires 2009:230). The story abounds in symbols of epiphany and of the transubstantiation of food into the body and blood of Christ. On the contrary, in Tchaikovsky's time food and drink are only temptations of the rising global consumer society. Petipa, for instance, instructs the composer on the representation of the Arabian world through elements of consumption (coffee) and specific, sensuous music or gestures: "COFFEE. Arabia. The kingdom of Yemen. Coffee mocha. Oriental Dance. From 24 to 32 bars of charming and voluptuous music."

National specificity is less associated with archetypes of the imagination than with consumer habits, dress and entertainment. Forster in England and Henry James in America were among the modernists who reacted most emphatically to the new culture of shallow tourism, of surfaces, of anonymous and indistinct hotel rooms:

The tourist is interested in everything as a sign of itself, an instance of a typical cultural practice: a Frenchman is an example of a Frenchman, a restaurant in the Quartier Latin is an example of a Latin Quarter restaurant, signifying 'Latin Quarter Restaurantness'. All over the world the unsung armies of semiotics, the tourists, are fanning out in search of signs of Frenchness, typical Italian behavior, exemplary Oriental scenes, typical American thruways, traditional English pubs; and, deaf to the natives' explanations that thruways just are the most efficient way to get from one place to another or that pubs are simply convenient places to meet your friends and have a drink, or that gondolas are a natural way to get around in a city full of canals, tourists persist in regarding these objects and practices as cultural signs. They put into practice Jean Baudrillard's claim that an accurate theory of social objects must be based on signification rather than needs or use-value. (Culler 1990: 2)

Here is the composition of the Grand Divertissement abounding in what Baudrillard would call "simulacra": Spanish Dance [Chocolate], Arab Dance [Coffee], Chinese Dance [Tea], Russian Dance, Dance of the Mirlitons, Mother Goose and the Pulchinellas.

Foods, drinks, instruments are added as distinguishing national features to French Mother Goose (Charles Perrault) or Italian Pulchinella of popular entertainment (*commedia dell'arte*). The way image, movement, rhythm and music suggestive of landscapes of the national soul are related to one another is

characteristic of the emerging movement of modernism – an international movement of movements borrowing heterogeneous elements from the various cultures of the world.

Mythical elements are also clusters of images and symbols migrating from one tradition to another.

The romantic artist will often pose as demiurge, creator of a world with laws given by him as originator and legislator.

The name of the clockmaker/ magician in the frame story as well as in the embedded story is Christian Elias Drosselmeier, all of them suggesting creation, epiphany of the spirit. Drossel is the name of a species of singing birds (*Turdus philomelos*), Elias contains El, meaning God, while *meier*, from Latin Major domus, goes back to [Hebrew](#) מְאִיר (*me'ir*, “illuminating”). His cousin, the toymaker in Nuremberg, is called Christoph *Zacharias Drosselmeier*. In the Old Testament, Zechariah is the father of John the Baptist who introduces Christ to the crowds at His baptism in the Jordan River. He is the carrier of Christ, Christophoros, while Christian Elias Drosselmeier is associated with Christ himself, with light, creation, prophecy and revelation. Fritz would like to command the toys in the castle, but his Pate [Godfather] Drosselmeier tells him that he had created a world that only functions according to its laws. The nutcracker, as well as Christ, is both sacrificial victim and saviour (bleeding but overcoming with the sword given to him by Marie, reminiscent of the two-edged sword brought by the Lamb in The Revelation). As well as the word of the Scriptures, which is double-edged, that is, it has both a literal and a figurative meaning, Drosselmeier's toys prefigure Marie's union with his nephew. The end of the story is not, as David Blamires contends, the substitution of reality by fiction but the Christological script of the Lamb's prophecy coming true.

The Mouse King with his seven hissing heads is obviously a symbol of the snake, the archetypal figure of evil in the Bible, and of the dragon slain by Saint George, the overcomer. In the Bible, there are the seven crowns of the overcomer: Incorruptible, of Rejoicing, of Righteousness, of Life, of Glory, of Honour, Golden Crown (Revelation 14:14). The Nutcracker takes the crowns from the snake and gives them to Marie as a symbol of his victory. The crowns are later (in the real world and according to its logic) revealed to have been Drosselmeier's gift to Marie on her first anniversary when he had removed them from his clock chain. As clock maker and mender, as substitute of the owl (symbol of divine wisdom) perching on the big clock in the dining room, Drosselmeier seems to be in control of time seen as a chain of events. Marie's moments of loss of consciousness, which precede as many rites of passage, are associated with Drosselmeier and the clocks.

b) Changing literary conventions.

The conventions of representations in fairy tales vary not only with the historical context or changing ideologies, but also with the aesthetic taste and mutations in poetics from one cultural phase to another.

Hoffmann's romantic tale capitalizes on atmosphere and symbols. Viewed from the perspective of the three children, the Christmas tree is magic, and the events feel them with wonder and terror. In the wondrous gifts, Louise sees Christ's gifts handed over to them by their parents. Fritz mixes up reality and Marie's dream world, Drosselmeier or the toys appearing to him as agents in both worlds. Marie is the most emotional and imaginative of all, her version of the story suspending our disbelief in the supernatural occurrences. The mice community is destructive, similar to the serpent's work of destroying God's creation. They break into rooms through lime, broken bricks, sand, restoring the building to the elements. The heap of lime and sand in the drawing room, barring Marie's retreat to her bed suggests a grave – the realm of death. This is an inarticulate world, outside the intelligible Logos, outside of time measured by the clock – an emblem of civilization, of nature known and controlled - collecting from anonymous noises and from the fire in hell: “The great clock whirred louder and louder but it couldn't strike [...] It began to rustle and to

whisper and to rattle [...] running trutting galloping behind the walls [...] Lights flashing out of the crevices in the flook – eyes of mice. “

On the contrary, writing some three decades later, in the dawning age of positivism and realism, Dumas insists upon circumstantial aspects, elements of social life and relationships, sources. The extensive frame narrative has absolutely no connection with the story which he reports to its true source, German Hoffmann, and to customs in that country which differ very much from those in France:

Donc, l'Allemagne, étant un autre pays que la France, a d'autres habitudes qu'elle. En France, le premier jour de l'an est le jour des étrennes, ce qui fait que beaucoup de gens désireraient fort que l'année commençât toujours par le 2 janvier. Mais, en Allemagne, le jour des étrennes est le 24 décembre, c'est-à-dire la veille de la Noël. Il y a plus, les étrennes se donnent, de l'autre côté du Rhin, d'une façon toute particulière : on plante dans le salon un grand arbre, on le place au milieu d'une table, et à toutes ses branches on suspend les joujoux que l'on veut donner aux enfants ; ce qui ne peut pas tenir sur les branches, on le met sur la table. (Dumas :web)

[As Germany is a country different from France, it has customs different from ours. In France, the first day of the year is the day of the New Year, so that many people would very much like the year to always begin on January 2nd. But, in Germany, the day of the New Year is December 24, that is to say the eve of Christmas. On the other side of the Rhine, New Year gifts are given in a very special way: a large tree is planted in the living room, placed in the middle of a table, and from all of its branches are hanging the toys that one wants to give to the children; what cannot be hanged on the branches, is put on the table.]

The story is dismissed as pure fantasy, not to be compared in point of literary merit to the great epics – the *Illiad*, the *Odyssey*, or Tasso's *Jerusalem Delivered*. He has to be tethered to his chair by the children before he accepts to tell the story in exchange for his regained freedom. Unlike the Hoffmann story, where everything is part of everything else, Dumas disengages himself from the story (also through the distancing “Once upon a time” opening formula), destroying its credibility, and transforming it into a realist type of narrative with detailed portraits of the characters, on which he passes judgement like an omniscient narrator:

Sa sœur Marie, tout au contraire, était une frêle et pâle enfant, aux longs cheveux, bouclés naturellement et tombant sur ses petites épaules blanches, comme une gerbe d'or mobile et rayonnante sur un vase d'albâtre. Elle était modeste, douce, affable, miséricordieuse à toutes les douleurs, même à celles de ses poupées ; obéissante au premier signe de madame la présidente, et ne donnant jamais un démenti même à sa gouvernante, mademoiselle Trudchen ; ce qui fait que Marie était adorée de tout le monde. (Dumas: web)

[His sister Marie, on the contrary, was a frail and pale child, with long hair, naturally curly and falling over her little white shoulders, like a radiant sheaf of gold moving in an alabaster vase. She was modest, gentle, affable, sensitive to all pains, even to those of her dolls; obeying the first sign of the magistrate's wife, and never giving a lie to her governess, Mademoiselle Trudchen; which made Mary loved by everyone.]

He also describes furniture in detail, rooms being clearly seen in their materiality and with himself voluptuously sinking into “an enormous armchair à la Voltaire” instead of being wrapped up in shadows of uncertainty.

The Knutcracker story and its adaptations or music transpositions allow thus of integrated teaching which appeals to several disciplines: the history of literature, the poetics of literary phases, political history, history of music, correspondences between the arts, genre and media studies, rhetorical figures and devices ...

Another aspect of Hoffmann's tale that seems to us especially relevant to literary studies is its generic **hybridity**. The notion of genre – which implies patterned articulation of the text, plot, character construction etc. – had been at the centre of attention in the neoclassic age, the neo-types (for instance, the burlesque, the mock, heroic, the anti-blazon) being concomitantly imitation of classical models and systematic departures of transformation (the mock heroic turning the ancient epic upside down, the anti-blazon reversing the flattering and schematic portrait of the lady in the sonnet, etc.). With their emphasis upon originality or self-expressionism, romantics and modernists rejected the constraints of generic identity, playing freely with generic conventions (the ballad, an epic and folk genre, being “canonized”- Russian formalist critic speaks about the canonization of the junior branch – for high art and modulated into lyrical form by Wordsworth, among others, or, the ode changing from song of praise to philosophical meditation in John Keats).

Can we speak, in such cases, about deliberate transformations of a genre from without, or are texts rhizomatic textures, linking up laterally, not only with other texts, as in Kristeva's and Barthes's intertextual generational description mentioned in the Introduction, but also with the historical world out there, as in the rhizome cognitive metaphor used by Gilles Deleuze and Félix Guattari in *A Thousand Plateaus?*. The following passage in a book on Deleuze casts light on the issue of generic identity (the features that make a sonnet be a sonnet), but also on that of generic change (the romance changing into burlesque in Don Quixote, for instance):

For Deleuze and Guattari, identity can be understood as one of the many ways in which society organizes, and tries to make sense of, the chaos and flux of the world. Bodies are not static entities but exist in a state of continuous change. In order to make sense of this, bodies become stratified; arranged within grid-like categories such as sex, gender, colour, ethnicity, religion, sexuality, age and ability. Such categories can be extremely useful, for they create a stable sense of ‘self’ and enable the production of the thinking, speaking, political subject. Yet they are also limiting, for they reduce the body to particular modes of being and interacting; affecting not only how the body is understood, but its potentiality; its future capacity to affect and be affected. Categories of identity can also reduce the capacity for relations between bodies because they rely on, and reproduce, an external, negative notion of difference; a difference which consists in its differing from, or in relation to, an ‘other’. For Deleuze, difference is, first and foremost, an internal – rather than relational or external – process. A body is produced through an internal differentiation (as when cells differentiate) and, over time, continually differs from itself. This view presents difference as positive and productive, rather than negative and subtractive; difference is that which produces life itself, and enables the production of the new. (Hickey-Moody & Malins 2007: 5)

But how does genre change if not through the author's intentional act of inscription? If we think in terms of intertextuality and rhizomatic linkage with history, then genre will, on the one hand, tend to self-preservation so that author and reader can process the message with the help of codes learned by both in the process of socialization, education or acculturation.

Hoffmann is writing a fairy tale whose action is taking place on the Eve of Christmas. Fairy tales are usually love stories, and also indebted to traditional forms of representation. It is in **romances** of the Middle Ages that mortals and immortals cross paths. Marie and the Nutbreaker are constructed in the image of the hero and heroine in romances. He wears a piece of her garment, like the knight wearing his

lady's blazon. He risks his life to save her. He performs fits of bravery to her greater glory and gives her his trophies – the golden crowns. Love should be unconsummated, so Drosselmeier the Young, who saves Pirlipat, should be a boy who has not reached male maturity (never shaves, never wore boots). Marie, in her turn, is ready to sacrifice everything to save the Nutbreaker. Their love receives blows from everybody around, they are the ill-starred lovers who have to overcome difficulties. She loves the Nutcracker despite his grotesque look, the heroine passing in this way the test of innate wisdom and goodness.

Being a tale for Christmas time, a related genre is the Christmas **miracle**: toys become alive, dreams, wishes and prophecies come true. The journeys across ontological borders, the materialization in the real world of characters encountered in dreams, the whole world of confectioners, ginger bread, sweets, sugar plum, Drosselmeier as godfather, etc.. are all versions of the Epiphany, of the incarnation of the spirit in the real world, such as the birth or the baptism of Christ, as well as of the mass which is the ritualistic remembrance of the crucifixion and the believers' sharing in the body and blood (a leitmotiv in the tale) of Christ.

Another genre that is absorbed into the gravity pool of *The Nutbreaker* is the legend. Places, typical actions, proverbs or sayings are often explained in light of some fabula, some old wives stories. Such is the saying "to break a hard nut" which is to be understood through an event illo tempore – the story of Princess Pirlipat.

At the same time, once removed from oral transmission to writing, that is, once it has got into the intersubjective order of culture, the fairy tale is subsumed under the destiny of artefacts which is that of historicity, of becoming, of transformation.

As an artefact of the eighteenth century, Hoffmann's *Nutcracker* links up both with the world of writing and with the real world of the Enlightenment, of the French Revolution and of its aftermath.

The nut with a Chinese name, the breaking tool, the pageants of slavery and of past glory (for the Mogul and the Sultan world had been tamed) seem to be allusions to that crucial moment of early modernity when the ancient regime of monarchic absolutism, the Europeans' destructive wars with the Turks, or medieval fanaticism had been swept out from the scene of history. Hoffmann evinces a sense of change. His world is no longer static, with characters remembering things that happened illo tempore and which endure in time or are endless (they might still be living ...). The mighty emperors are less characteristic of fairy tale kingdoms than similar to the falling empires in Count Volney's *Ruins* which is threaded by the rebellious spirit of the French Revolution. Without exception, the rulers as well as commoners, in the fairy world are terrified by one word: Confectioner. There is more in it than the creation of a figure emblematic of the sugar plums, candied fruit and comfits. The Confectioner is a God-like figure who governs their destinies. Society looked no longer static. Christmas is politicized – the Saviour can also be a revolutionary who sets slaves free. Although pitifully ended, the Revolution had revealed the weakness of the monarchs who play God in relation to their subjects. In Great Britain, Daniel Defoe had written upon the visit of the Russian Tsar, who, in his country, had instated the rule of law in place of feudal absolutism. Marie's dream of Pirlipat's kingdom contains satirical hints and allusions to the changing political realities which allow us to designate this age as one of modernity and as one in which the luminaries were a sort of confectioners who were thinking a new society into being. French Voltaire and German Chladenius admired English historians for being less interested in monarchs than in social manners, customs, in the assets of civilization. Unlike haughty Princess Pirlipat who demands to be served but does not give anything in return, Marie descends to the status of a common girl who asks to be allowed to do some work herself, learning how to cook in view of a future marriage.

Hoffmann's book links up with Swift's imaginary voyages to other worlds, and may be seen as a version of bildungsstory – Marie's initiation in love and work on her way to maturity.

Something similar happens in the case of Alexandre Dumas's reinscription. The fairy tale pattern keeps changing in significant ways, while also remaining recognizable. Hybridization is an ongoing process, but this time the rhizomatic links betray a different philosophical outlook. The Revolution and the Napoleonic wars are dead and buried, and a bourgeois society is looking around complacently at its new domestic comforts ensured by domestic architecture, furniture – which significantly mixes allusions to King Louis and Voltaire, one of the luminaries whose writings brought about the king's downfall. The collapse of the republic of fraternity had disenchanted people with revolutions and heroes. Christmas goes and children alike tasted the new peace and material comfort. Fashion, the socializing occasions, parties are meticulously described. The only fight is between the narrator and the children who tie him down to the chair in order to force him into telling a story ... the love of descriptions, whether of bodies, garments or furniture. The fairy tale betrays signs of the contemporary art of fiction of the realist school. Patterns keep changing, but they are still there.



Fig 1. : Spanish Dance [Chocolate]

Source: web:

https://www.google.ro/search?q=Spanish+Dance+%5BChocolate%5D&rlz=1C1GCEA_enRO779RO779&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjccqrxioDbAhWFYVAKHaN0AcAQ_AUICigB&biw=1366&bih=662#imgsrc=C_Sxz2hZt89krM



Fig. 4. Mother Goose

Source: web



Fig. 5. Clowns of the commedia dell' arte

Source: web

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