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Semiotic Resources in *The Curious Incident* of the Dog in the Night-Time: The Narrative Power of the Visual in Multimodal Fiction MARIANA MUSSETTA Universidad Nacional de Villa María

Abstract

Multimodal fiction, as recently studied by Hallet (2009), Gibbons (2012), and Maziarczyk (2011; 2012), among others, is the phenomenon shared by those novels which combine various semiotic modes in the development of the narrative. The purpose of the present work is to account for the most salient semiotic resources used in the multimodal novel *The Curious Incident of the Dog in the Night-Time* by Mark Haddon (2004). In view of the work which still needs to be done in the field, and the increasing profusion and diversity of multimodal literary forms in recent years, this study aims at throwing new light upon the diverse and significant ways in which the strategic inclusion of various semiotic resources (Graphic Surface; Navigational Function; Metadiscursive Devices, Performative Function.

Resumo

A ficção multimodal, recentemente estudada por Hallet (2009), Gibbons (2012) e Maziarczyk (2011; 2012), entre outros, é o fenómeno compartilhado por aqueles romances que combinam vários modos semióticos no desenvolvimento da narrativa. O objetivo do presente trabalho é dar conta dos recursos semióticos mais salientes usados no romance multimodal *The Curious Incident of the Dog in the Night-Time* de Mark Haddon (2004). Tendo em conta o trabalho que ainda é necessário fazer neste campo e a crescente profusão e diversidade de formas literárias multimodais nos últimos anos, este estudo visa lançar nova luz sobre as diversas formas em que a inclusão estratégica dos vários recursos semióticos opera na ficção. **Palavras-chave:** Ficção Multimodal; Recursos Semióticos; Superfície Gráfica; Função Navegacional; Dispositivos Metadiscursivos; Função Performativa.

he present work will focus on the study of the multimodal novel *The Curious Incident of the Dog in the Night-Time (TCI* henceforward) by Mark Haddon (2004), which features a first-person teenage narrator, Christopher, who suffers from Asperger's.¹ With his exceptional skill as a writer, Haddon enables readers to enter the intricate mind of his character by

¹ Asperger's Syndrome is "a developmental disorder that affects a child's ability to socialize and communicate effectively with others" (Anderson, 2008), and it did not become standardized as a diagnosis until the early 1990s. It was popularized by Raymond, Dustin Hoffman's famous character in the film *Rainman*, who suffered from a similar condition.

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means of a text of a highly multimodal nature, deploying typographical experiments, footnotes, appendices, lists, maps, graphs, drawings, pictures, photos, diagrams, mathematical equations, and the facsimile representation of handwriting, posters and signs.

Multimodality in fiction as recently studied by Hallet (2009), Gibbons (2012), and Maziarczyk (2011; 2012) among others is the phenomenon shared by those novels which "feature a multitude of semiotic modes in the communication and progression of their narratives" (Gibbons, 2012: 420). Multimodal stories—also called *visual texts*—are those fictional texts which purposefully subvert graphic and typographical conventions by means of the introduction of various *semiotic resources* which are devices belonging to the verbal, non-verbal, or combinations of verbal and non-verbal modes. This work will aim at accounting for the diverse and significant ways in which the strategic inclusion of various semiotic resources operates in Haddon's novel.

Doing away with the dichotomy word/image in order to approach the graphic surface—"the layout of the page of a text" (White, 2005: 6)—in TCI enables readers to think of the novel as working in a similar fashion graphic novels do: rendering the construction of meaning from the imbrications of verbal and non-verbal means. Hirsch speaks of the comic book In the Shadow of No Towers (2004) as having words functioning as images and images asking to be read as much as seen, borrowing Phelan's concept of *biocularity* [sic] to assert that comics are biocular texts par excellence, as they ask "to read back and forth between images and words," revealing "the visuality and thus the materiality of words and the discursivity and narrativity of images" (Hirsch, 2004: 1213). Similarly, Haddon recurrently reminds readers of the visual nature of printed words by his use of bold type and different fonts and his nonconventional use of the space available on the page while shifting from text to image to text again, resorting to a combination of the verbal and the non-verbal to unfold his narrative. The exploitation of letter writing and chapter labeling as well as the introduction of footnotes, pictorial devices, and scientific and academic discourses in TCI are some of those semiotic resources which visually contribute to the narrative and to character development in unique and vital ways.

In the combination of semiotic resources, Haddon achieves an internal logic that intermittently plays with the foregrounding of the materiality of the text and with the creation of suspension of disbelief, where conventions which are challenged are naturalized in order to be broken again, in a game readers take part in, and where the mimetic (White, 2005) and the self-reflexive (McHale, 1987) go hand in hand, sometimes functioning in the same device. In this respect, the presentation of Mrs. Boone's letters sent to her son Christopher is a case in point. On the one hand, they display certain graphic features which differentiate them from the rest of the text: they appear entirely in bold and italics, and they are plagued with spelling

mistakes.² All these textual characteristics stand out from the rest of the text, and thus function self-reflexively because they disrupt the graphic surface of the page—and deautomatize the process of reading—since the reader's attention is called to the book as an artifact, just as McHale states of graphically exploited fiction (190-3).

As readers continue reading, however, they discover that the spelling mistakes have not been accidentally typed but purposefully included, and are then quickly naturalized together with the rest of the graphic texture of the letters. The change of font and the spelling mistakes can also be seen as an attempt to make them appear "closer to real life," closer to the appearance of handwriting and thus to the illusion of their having been genuinely reproduced. As Maziarczyk points out about a common practice for multimodal novels, the alteration in font to present Christopher's mother's letters are clearly "employed to signal the change in the narrative voice" (2012: 119), to remind readers that it is her own words they are reading.

This is reinforced by the inclusion of the facsimile of the handwriting with which the addressee's name is written on the envelope, and by the reproduction of the postmark. The letters perform a mimetic function since their graphic surface, especially the inclusion of spelling mistakes, contributes to convey the impression of their being reproduced "just as Christopher's mother wrote them," and not having been proofread or edited in any way: readers are closer to the illusion of Christopher's really having attached them to his book, the graphic surface of the letters-with the facsimile signature included-operating in a pseudo-indexical fashion. Their headings, on the other hand, vary from letter to letter: only three include the date, and not all the details regarding the address and telephone number are included in all of them. The mistakes and the missing details in some of the headings remind readers of Charlie Gordon's progress reports in Keyes' 1966 novel Flowers for Algernon, a fictional diary where low-IQ Charlie records his progress during his medical treatment to "make him smart" (2). His word choice, spelling accuracy, and grammar complexity vary according to the stage of his medical treatment, and thus he is characterized not just by what he reports as a narrator but by how he reports his experience in his diary. In TCI, the letters contribute to characterize Christopher's mother as careless, probably scatterbrained, and certainly not very well-educated. On the other hand, it is Christopher-as the meticulous narrator he is-who has included the letters strictly as they were written. The letters, then, become a useful device which contributes to build both characters simultaneously: Christopher and his mother.

² Typography is widely exploited in the novel in many instances beyond the letters. However, a thorough analysis of this resource is beyond the scope of the present article.

Moreover, the arrangement of Mrs. Boone's letters as presented to readers plays upon their curiosity in a stratagem that demonstrates narratorial power, and requires readers' attention because the expected convention, that of chronological order, is broken. Once they find out that the order of the presentation of the letters corresponds to the particular order in which Christopher finds them and reads them, it seems the most adequate move considering his obsessive need for accuracy in recounting events. His criterion is quickly naturalized, and readers engage in his game as if they were reading pieces of a puzzle they must put together to make sense of what happened in the story, while they are at the same time reminded of the book being an artifact (McHale, 1987: 190-3) as they have to go back and forth through the letters. Their dates and the two different addresses provided in them work as hints to solve a puzzle, as clues that help readers navigate them.

The narratorial control exerted through Christopher's way of presenting the letters can be considered performative, although it would be the opposite of a performance text as defined by Kutnik (1986), as the point is not an antimimetic spontaneous linguistic play but, on the contrary, a strategy to make readers mimetically accompany the narrator through his experience. In fiction, the graphic devices used to achieve this phenomenon are varied. In those novels where the narrator as a writer engages readers in the writing process, the graphic surface is sometimes exploited by means of crossed out sections, handwritten notes on the margins, or coffee spots on the page, in a sort of mimesis of production. This attempt of getting readers closer to the writer in their writing experience reminds them of Hutcheon's mimesis of process (1980: 39), applied in this case to the graphic surface of the page. In Litt's Finding Myself (2003), for example, the novel readers are presented with is in fact a fictional editor's draft of a novel, the text bearing all the notes, comments, additions and deletions she has made. While building two characters simultaneously-both the fictional writer/first-person narrator and the editor-the disruption of the graphic surface also bears its own fictional history, visible to readers. In Haddon's novel, however, such performative devices would help create the impression of spontaneity, of an unfinished product, which would go against Christopher's highly rational mind, so performativity is achieved by other means: the peculiar order in which the letters are presented.

Because of his obsession with truthfulness, Christopher also exercises his power as a narrator in the delay of the revelation of the content of the letters. He hides the letters after reading (and presenting readers with) the first one in order not to be discovered by his father, and readers have to wait for him (and performatively "with him") to present them with the other letters only after he recounts what activities he does during the days he has to wait before he has the chance to read them. What is more, suspense is enhanced by placing a chapter on mysteries and mathematical explanations between the inclusion of the first letter and the presentation of the others.

The series of five letters as displayed in the novel, anticipated by Christopher telling readers that he has found forty-three of them hidden by his father, is key to understanding the limitations in his grasping the significance of the letters. Although readers had been told at the beginning of the story that his mother had died two years before, they learn through her letters that she is in fact alive, living with her lover. In fact, the letters are an attempt to explain to him why she could not cope with living with a child with Asperger's, and to ask for his forgiveness. The letters also reveal she is unaware of the fact that Christopher's father has lied to him about her death. When the other four letters are finally disclosed, they are presented one after the other, and he does not react until the end of the fifth one, when he finally gets sick at the truth not of his mother being alive, which does not seem to affect him, but of his father having lied to him about it. Then his father also admits to having killed the neighbor's dog, and thus Christopher decides to run away to live with his mum not because he misses her but because he is afraid of the fact that his father can lie again and kill him as he has killed the dog. It is the exploitation of the letters as a graphic device, in their performative fashion, which contributes to readers' understanding of his obsession with truthfulness and his reaction after finding out he has been lied to.

The graphic surface in Haddon's novel helps subvert generic conventions and forces readers to resignify them in terms of their significance in the interpretation of the story and the delineation of the narrator. Even those graphic devices which are usually regarded as merely metadiscursive or "navigational" at first, like the numbering of chapters and the use of footnotes, are exploited in *TCI* in ways that go beyond a mere structuring function to bear a narrative function as well. Drucker also considers the role of such graphic devices as "an integral dimension of narrative texts" (121):

The distinction between the text-and-image elements of narrative and the elements I will identify with the general term *graphic devices* is crucial. Graphic devices are elements of layout and composition that organize and structure the presentation of narrative elements. ... The graphic devices include headers, page numbers, spacing, and margins in print materials; framing and diagrammatic elements in print and electronic media; and any other visual element that serves a navigational purpose. Navigation activity includes orientation and location within a work as a whole. Navigational devices provide the means for moving through or manipulating the sequence of the elements that constitute the narrative. (123)

In my view, the distinction between graphic devices and "text-and-image elements of the narrative" might more effectively refer to the latter as a subcategory of graphic device which might designate *any* strategic manipulation of any aspect of the page layout, and thus, provided their use is specifically intentional, should include not only headers, page numbers, and the like, but also a vast array of textual elements and aspects, from typography to illustrations, which contribute to convey meaning in the novel. Secondly, one could argue that *every component* of the text orients and locates readers, especially when it complies with the conventions of page layout. Every reader will, for instance, automatically move their eyes from the last word on the right at the bottom of the left page to the first one on the left at the top of the next page. Yet, it has to be granted that that there are certain elements in the text whose conventional purpose is specifically navigational, and that they are sometimes purposefully subverted, as in the case of Haddon's novel, where the way chapters are numbered is an interesting way to explore how specific navigational or metadiscursive devices can become significant contributors to characterization.

Readers are puzzled to see the first chapter labeled number 2, followed by Chapter 3, 5, 7, 11, and so on. They might even double-check to make sure that they have not skipped any. In this case, the exploitation of this graphic device contributes to the de-automatization of reading, and calls the reader's attention to the materiality of the text. It is only in the eighth chapter (number 19) that readers learn that Christopher has chosen prime numbers for the chapters of his book. From here onwards, the peculiar numbering of chapters enters a new dimension since they become instruments in the construction of the protagonist in an equally puzzling way to that of the order of the letters. He states:

Prime numbers is what is left when you have taken all the patterns away. I think prime numbers are like life. They are very logical but you could never work out the rules, even if you spent all your time thinking about them. (14)

Prime numbers work as an allegory of the impossibility of "working out the rules" in life. Christopher feels he cannot work out the rules for controlling social interaction or the parameters by which people monitor their own feelings and understand emotions, even though they seem to be very "natural" for most people. Besides, he likes the logical nature of prime numbers: they fulfill his need for rules. Reinforced by another graphic device—that of two tables where he demonstrates the process to work prime numbers out—chapter numbers become one more facet to discover the prism of Christopher's subjectivity, and viewing them only in terms of their navigational function would be to deny their potential to contribute to characterization.

To explore how footnotes are exploited in Haddon's novel can also provide further insight into the way the graphic surface works to convey meaning. Footnotes are generally believed to add minor or extra information, without which the main text can still be understood in more or less the same light, and they are characteristically shorter than the main text on the page by convention. Identified as typical of scholarly texts, they are widely deemed, according to Benstock, "inherently marginal" and "innately referential" (204). Effron, instead, speaks of footnotes in detective fiction as being able to

extend beyond simple citation into narratorial participation ...In slipping from the whole referential to the narratorial, these footnotes also slip between paratexts and *artificial paratexts*, where artificial paratexts are those that do not simply surround the fictional narrative but are part of it. (200)

On page 60 of TCI, footnotes take up half the page, and they are not only used to provide specific examples for the "behavioral problems" Christopher enumerates as having, but also to enlighten readers as to the reasons why he behaves in the way he does. In particular, his concern for truth is apparent in the sixth footnote, where he explains why he says "things that other people think are rude" (60). When in the footnote he states that he is told to always tell the truth but then he is not supposed to tell old people that they are old, or that they smell funny, readers see his "behavioral problem" in a different light, understanding his inability to conceive what it means to be rude in the same way other people do. In this way, the list of problems in the chapter belong to the sphere of the visible, to overt behavior, while the footnotes function as a vehicle into his reasoning, into what he chooses to share only with readers and not with the people around him. In this way, footnotes in TCI work together with the main text in conveying meaning. They are not simply supplementary as in scholarly texts, nor do they overrule the main text, as in postmodernist texts like Vladimir Nabokov's Pale Fire (1962), where the poem of the same name (placed on the page as the main text) ends up having much less weight than its footnotes. As a scholarly convention, footnotes are subverted in Haddon's because they make available what is in the narrator's mind, and contribute to readers' understanding of the narrative in a substantial way in the same manner the choice of chapter numbers goes beyond a metadiscursive device to become a character-developing tool.

The introduction of pictorial devices in the narrative, on the other hand, is another way to develop this complex character. Some of them are simple drawings which Christopher *re*produces in the text from the ones he has previously drawn; in other words, they are pictures of his own pictures, like the drawing of the alien he had drawn in class (95), or the inclusion of the cars he had painted on his mother's card (35). Some other pictorial occurrences, though, are representations of objects he perceives in his own world and everyday life, like the sticker he sees on someone's guitar case

(225), the label on his father's car (169), or his wooden puzzles (16). When an object he sees presents a particular pattern which calls his attention, he sometimes resorts to drawing the pattern itself and not the whole object, such as the patterns on his new pajamas (246), or the ones on the train carriage walls and seats (227). These patterns reveal his outstanding memory and his fascination with repetition, order and accuracy, while they remind readers of his dependence on predictable patterns in everything he does. On the other hand, he also includes pictures which are neither reproductions of other pictures nor of objects he sees, but directly drawn "from his head" (248) instead, like the tessellated crosses he imagines (248), or the constellation of a dinosaur he comes up with by means of combining in a new way the same dots (stars) which make up the Orion Constellation (156, 157). Typically, such devices are clearly introduced by the same phrase he uses to present other non-verbal resources: "it was/looked like this," and are woven into the narrative by this introduction and a subsequent verbal comment on it, which enables readers to advance the reading of the text smoothly. As in most multimodal novels, Christopher is the narrator/ presenter defined by Hallet: apart from narrating a story, the narrator "searches, retrieves, and 'collects' documents and sources and eventually presents them to the reader, the process of narrating includes 'showing' and 'presentation" (150).

Christopher's drawings, especially the "pictures of his own pictures," are quite simple and sketchy, and they contrast with the abstraction and accuracy of his diagrammatic resources. His concern with sharing them with readers together with their subject matter and the reason why he draws them in the first place reveal the fact that he is just a boy: his drawings include cars drawn on a hand-made card for his mom (35), an alien he had painted in his art class (95), or a bus "in perspective" he had drawn in his mother's house in order not to think about the stressful situation he was going through (256). His simple drawings would probably be easily associated with a younger boy even, one who has not entered puberty yet, and not with a fifteen-year-old like Christopher. His pictures, then, operate as character developing strategies which contribute to readers' understanding of the narrator as a complex protagonist. Although he is capable of solving complex math equations and devising statistical graphs, he is also interested in showing readers the basic pictures of cars, buses, or aliens he draws. He might resemble an adult in some of his abilities, but he can also think and conceive the world as a child in many ways. The striking combination of seriousness and naivety he presents helps shape him as a unique character, and the vast array of nonverbal resources the novel portrays contributes to character-building in ways that verbal resources would probably not be able to.

From this perspective, the smileys he introduces constitute a particularly interesting pictorial resource to analyze. In Chapter 3, he introduces the

simplified pictorial representation of faces expressing a number of feelings which Siobhan, his teacher, has shown him (2, 3; Figure 1).

3

My name is Christopher John Francis Boone. I know all the countries of the world and their capital cities and every prime number up to 7,507.

Eight years ago, when I first met Siobhan, she showed me this picture



and I knew that it meant 'sad', which is what I felt when I found the dead dog.

Then she showed me this picture



and I knew that it meant 'happy', like when I'm reading about the Apollo space missions, or when I am still awake at three or four in the morning and I can walk up and down the street and pretend that I am the only person in the whole world.

Then she drew some other pictures

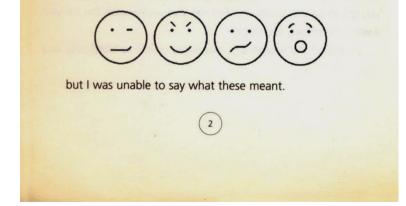


Figure 1. "Smileys." From *The Curious Incident of the Dog in the Night-Time* by Mark Haddon. Published by Red Fox and Jonathan Cape. Reprinted by permission of The Random House Group Ltd.

He goes on to tell readers that he could only recognize the sad face and the happy face, and that he has asked his teacher to write down next to each of them what their exact meaning is in order to compare them to the actual gestures people make in order to understand what they are feeling. However, it is very difficult for him to interpret people's facial gestures and their feelings, and on page 242 he tells readers that one of his favorite dreams consists of dreaming that the only people surviving on Earth are those who do not understand "these pictures," introducing this time the four faces he had not been able to comprehend when his teacher had shown them to him. Although McHale speaks about conceptual icons to refer mainly to typographical experimentation and spatial resources, Christopher's "smileys" could also be viewed as conceptual icons, in that they "lend a kind of concreteness and palpability to complex or diffuse or highly abstract ideas... They can also serve to capture the unutterable" (McHale, 1987: 186). The simple drawings the narrator introduces highlight his concern with the mystery that emotions entail for him, constituting an attempt at comprehending the complexity and abstraction of the world of feelings by providing them with "concreteness and palpability." They are his tools for trying to understand the emotional dimension while they are also devices which enlighten readers in terms of the narrator's limitations to make sense of the world of affect. Likewise, graphic devices in TCI as a whole contribute to give tangibility to Christopher's mental structure and vision of the world.

Due to the narrator's interests, special competencies, and "visual reasoning," academic and scientific discourses in TCI intermittently take over the fictional text. The import from academic discourses of the footnote convention in its verbal/navigational mode, with the resulting exploitation of its narrative potential, for instance, is an example in question analyzed above. Indeed, the novel presents readers with innumerable instances where academic and scientific discourses are often woven into the novel in a multimodal way: not only verbally but also by means of other modes, namely through diagrammatic, notational and numerical, spatial, and visual metadiscursive/navigational resources. Christopher resorts to maps and plans, concept maps,³ scientific diagrams, and the visual display of certain mathematical calculations. Christopher also introduces instances of number sequences, calculations, and mathematical notations applied in equations and formulas. Moreover, enumerations and lists also permeate the novel, exploiting page layout and navigation while challenging expected generic conventions. Combined, such resources contribute to the unique graphic surface the novel presents while they account for the ease with which the

³ A *concept map* is a hierarchically structured graph which includes concepts (usually represented as circles or boxes) and relationships between concepts represented as lines. "Concepts can be defined as objects, events, situations, or properties that possess common critical attributes and are represented by icons or symbols, such as key words" (Ausubel, quoted in Seel, 2012: 730).

protagonist switches from one mode to the other. As meaning-making modes in their own right, they make the narrative unfold in unique ways, and also help shape the character in his peculiar frame of mind. As Hallet asserts, they "constitute visual or graphic representations of the narrator's mental models or cognitive perceptions" (136).

Let the doors be called X, Y and Z.

Let C_X be the event that the car is behind door X and so on.

Let H_X be the event that the host opens door X and so on.

Supposing that you choose door X, the possibility that you win a car if you then switch your choice is given by the following formula:

 $P(H_{z} \land C_{y}) + P(H_{y} \land C_{z})$ = P(C_{y}).P(H_{z} | C_{y}) + P(C_{z}).P(H_{y} | C_{z}) = (1/3,1) + (1/3,1) = ²/3

The second way you can work it out is by making a picture of all the possible outcomes like this

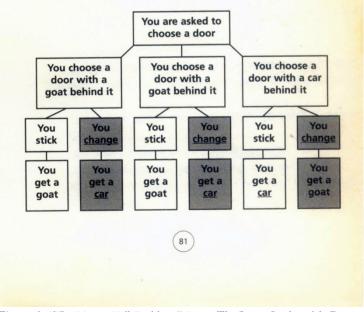


Figure 2. "The Monty Hall Problem." From *The Curious Incident of the Dog in the Night-Time* by Mark Haddon. Published by Red Fox and Jonathan Cape. Reprinted by permission of The Random House Group Ltd.

Almost invariably introduced by "it was/is like this," the sources of Christopher's diagrammatic resources are sometimes external, for instance when he reproduces a zoo map (110), or a page from a London atlas (231). Some other times, instead, he draws inspiration from his own mind, or, more accurately, he reproduces on paper "the pictures he makes in his head" (162, 163, 235), like the two concept maps where he considers all the options he can choose from when escaping from his father (163). In fact it is the same concept map appearing twice, once with all possible choices, and the other one with all the choices crossed out but one. The map features a box reading "Now" in the center, with arrows aiming at similar boxes around it with the different options inscribed: "Living with Mrs. Shears," "Going Home," "Staving in the Garden," "Going to Live with Uncle Terry," and "Going to Live with Mother." The selected option is going with his mother, which is what he finally decides to do. By means of this graphic device, thus, he highlights both his need to visualize his thinking and to reproduce it in his story. The fact that he also makes use of a concept map when explaining the Monty Hall problem (81), a complex logic puzzle, highlights the fact that this kind of diagrammatic resource is useful for him to refer to options and choices, as the two instances where they appear show (Figure 2).

Instead, the other diagrams he introduces seem to deal with another concern of his: the variables time and space: From the scatterplots⁴ for frog population density through time to the graphic representation of the Milky Way and its two vectors signaling how many stars people can appreciate in the sky according to which way we look, the variables involved are always time and space. Indeed, time and space are the two axes of the Cartesian graph⁵ he introduces to refer to how much people can get to know about phenomena occurring in the universe: a diagram defined by Christopher as "a map of everything and everywhere" (194). The way he refers to this latter diagram can be seen as indicative of his obsession with being able to measure reality in all its aspects, that is to say, with controlling the world around him. If he were actually able to draw "a map of everything and everywhere," that would mean he would be able to grasp the meaning of the outside world. No mystery, then, could escape his rationality. That explains his need to do away with imprecision and to solve puzzles and enigmas. His peculiar way of approaching and conceiving space can be interpreted from this perspective: in tandem with his need to pay attention to detail and his extraordinary visual

⁴ According to the *Concise Encyclopaedia of Statistics*, "a *scatterplot* is obtained by transcribing the data of a sample onto a graphic. In two dimensions, a scatterplot can represent *n* pairs of observations. A scatterplot is obtained by placing the pairs of observed values in an axis system. For two variables X and Y, the pairs of corresponding points...are placed in a rectangular system. The dependable variable Y is usually plotted on the vertical axis (coordinate), and the independent variable X on the horizontal axis (abscissa)" (Dodge, 2008: 475).

⁵ A *Cartesian graph* employs a coordinate system of axes that are perpendicular to each other and intersect at a point known as "the origin" (Dodge, 2008: 237).

memory, he imperatively needs to know the exact location of everything, and this is reflected in his narrative by means of the profusion of maps and plans, which actually constitute one of the motifs of the story.

As for his fixation with the other variable, that of *time*, he himself explains it like this:

... time is a mystery, and not even a thing, and no one has ever solved the puzzle of what time is, exactly. And so, if you get lost in time it is like being lost in a desert, except that you can't see the desert because it is not a thing. And this is why I like timetables, because they make sure you don't get lost in time. (194)

Time is also a mystery in the sense that it does not have any physical or concrete entity. This fact both fascinates and haunts Christopher, since he feels drawn to trying to discover what its secret is, but suffers terribly when a schedule is not fulfilled and he is forced to change plans.

The way he introduces the map of England from his classroom as he remembers it (205) is another especially interesting case. When he tells readers about his experience on the train on his way to London, he says he tried to figure out how far he was from his destination by recalling the map of England on his classroom wall, and then he introduces a sketch of the English map with the Southern tip pointing to the left and the Northern heading to the right. In fact, the map is at the same time indexical of the fictional map in his classroom and iconic of the way Christopher pictures it in his head in an effort to adapt the layout of the cardinal points in the map to the direction in which the train should be taking. Thus, the narrator resorts to diagrammatic resources to show rather than tell readers what it was like "in his head" (205).

His tendency to show rather than tell is also present in the visual display of certain mathematical calculations or problems. By means of simple tables, he demonstrates how to work out prime numbers (14) and how to solve a math puzzle called Conway's soldiers' problem (181). In the first example, the table contains all the positive numbers of the world and one has to take away all the numbers which are a multiple of two, then those which are a multiple of three, and so on until the only numbers left are prime numbers (Figure 3).

In the case of the Conway's soldiers puzzle, one has to move the colored tiles of an imaginary endless chessboard in specific directions. Just as in the example of the prime numbers, the tables of the Conway's soldiers puzzle are embedded in the narrative text in such an efficient way that they complement the construction of meaning with verbal resources occurring before and after them, working together to put meaning across.

19

Chapters in books are usually given the cardinal numbers 1, 2, 3, 4, 5, 6 and so on. But I have decided to give my chapters prime numbers 2, 3, 5, 7, 11, 13 and so on because I like prime numbers.

This is how you work out what prime numbers are.

First, you write down all the positive whole numbers in the world.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
SALASSA GALANCE	32	A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OWNE	-						
41	42	43	44	45	46	47	48	49	etc.

Then you take away all the numbers that are multiples of 2. Then you take away all the numbers that are multiples of 3. Then you take away all the numbers that are multiples of 4 and 5 and 6 and 7 and so on. The numbers that are left are the prime numbers.

11	13		17	19	
	23		-	29	
31			37		
41	43	-	47		etc



Figure 3. "Working Out Prime Numbers." From *The Curious Incident of the Dog in the Night-Time* by Mark Haddon. Published by Red Fox and Jonathan Cape. Reprinted by permission of The Random House Group Ltd.

At other times, instead, because of the complexity of certain explanations, he decides to develop an idea in different modes, one after the other, so that readers can choose the semiotic resource they prefer in order to understand his explanation. In this latter case, besides working together to convey meaning, different modes offer alternative ways of conceiving a particular idea. Hence, in his explanation of the solution to the Monty Hall Problem (80, 81), he introduces the development of a probability equation first, and then simply goes on to say that a second way of working the problem out is by a making "a picture…like this," followed by a concept map which combines diagrammatic and verbal resources. Although he then switches to the verbal mode to draw a conclusion about the problem, the solution to the riddle itself is never fully explained by linguistic means; it is instead provided in diagrammatic and mathematical discourses—with particular visual salience—borrowed precisely from academic and scientific fields, with which the narrator seems to feel perfectly at ease.

Also following conventions of scientific and academic writing, Christopher is concerned with the accuracy and authenticity of the diagrammatical resources he introduces, and thus makes use of metadiscursive remarks about certain graphic devices when he deems it necessary. He explains that the graphs about frogs population in the school pond are "hypothetical, just an illustration" (126-127). Similarly, he makes clear that the plan of Swindon he introduces "is a hypothetical diagram too, and not a map of Swindon" (173), and confesses that the Swindon train station map "is not a very accurate map" and that it is "an approximation" because he was too scared to "notice things well" (179). In the three cases mentioned, however, his diagrams impress the average reader as quite precise, likely to have been drawn by a professional. His comments on his diagrams, then, contrast with readers' perception of them and raise their awareness about his precision standards and his overwhelming need to be an accurate narrator.

As many Asperger children, his extraordinary scientific reasoning and outlook on reality derive from his outstanding logical-mathematical intelligence, which goes together with his intense interest in Mathematics (Chiang and Yueh, 2007). All the occurrences of equations, formulas, and mathematical notations of some kind appear in the novel in combination with the verbal mode, and are clearly introduced when they stand out from the main textual block, operating together with spatial and typographical resources—such as the pervasive use of bold type—to provide them with special salience. Such instances translate as the ease with which the narrator switches discourses and blends conventional narrative—understood as the unfolding of a sequence of events—with the explanation or simple introduction of math equations.

However, the reason why Christopher likes Math is not its straightforwardness, and he explicitly does away with this assumption, which many people, like Mr. Jeavons, the psychologist at school, might tend to infer from his behavior:

Mr. Jeavons said that I liked maths because it was safe. He said I liked maths because it meant solving problems, and these problems were difficult and interesting but there was always a straightforward answer at the end. And what he meant was that maths wasn't like life because in life there are no straightforward answers at the end... This is because Mr. Jeavons doesn't understand numbers. (78)

Both the Monty Hall problem and his statistical explanation for the fluctuation of the frogs population in the school pond aim at pointing out that numbers are more complicated than readers might think, and that they might not provide a straightforward answer:

[S]ometimes things are so complicated that it is impossible to predict what they are going to do next, but they are only obeying really simple rules. And it means that sometimes a whole population of frogs, or worms, or people, can die for no reason whatsoever, just because that is the way the numbers work. (128)

Just like the way in which he cannot predict what the frogs in the pond will do next, he is not able to anticipate how people might react in social interaction. To be immersed in society, to have to interact with people, and to actually and effectively understand them in their emotional dimension is something Christopher finds extremely difficult. Thus, this interest in Math accounts for his need to grasp complexity, and highlights the fact that for him, Math and reality—"real life" as Mr. Jeavons would put it—are not so different after all. In fact, Math as a motif in the story could be viewed as a metaphor for everyday life in Christopher's world: reality "obeying simple rules," yet impossible to be figured out.

Together with the incidence of Math intertwined in the narrative, and also turning the text evocative of academic and scientific discourses, the high incidence of enumerations and lists exploits the graphic surface of the novel while they give prominence to certain spatial semiotic resources and navigational/metadiscursive operations. As the narrator likes things "in a nice order" (41) he recurrently resorts to lists to refer to the most varied topics, from the kind of information people remember when they visit the countryside (174) to the different answers posted to a magazine column (79-80). They are always clearly introduced with phrases such as "these are some of the clues" (90), or "these are examples" (19), so they are always easily understood as part of the narrative. Sometimes they are fairly abstract and "scientific," like the enumeration of the three conditions which enable life on Earth to occur, and some other times quite concrete, such as the case where he provides an inventory listing of the objects he has in his pockets when he is taken to the police station. Regardless of their level of abstraction, though, all of them are visually reminiscent of discourses foreign to fiction. Their format and nomenclature is clearly identified as academic and/or scientific, with its introduction of elements by means of numbers or letters in bold followed by a closing parenthesis or a period, and separated from the main text block to enhance salience and avoid ambiguity. Their layout and organization through letters and/or numbers metadiscursively demand from readers certain navigational strategies that are not conventionally or typically needed in the reading of fiction. However, because of their frequency and their precise nature, readers quickly naturalize them, and this enables them to get closer to Christopher's reasoning. The expression "to see" the world through the narrator's "point of view" becomes more literal than in the usual sense of the phrase, since the narrator urges readers to "visualize" concepts in the particular layout which he provides. On the other hand, this underscores the incidence of academic/scientific discourses in the novel, which not only come into the text in the verbal mode (through the content being discussed) but also formally by means of spatial and metadiscursive/navigational semiotic resources.

A special case where academic/scientific discourses—namely that of Math—enters the novel both formally and thematically is the introduction of an appendix at the end of the novel with the solution to Christopher's Math problem. What makes this scientific element different from others in the novel, like Christopher's equations or diagrams, is the fact that, unlike the latter cases, Christopher is not the one who initially has the idea of including the appendix; his teacher does. The reason for this is that his original plan was to include the four-page resolution to the Math problem within the narrative. Siobhan, instead, suggests that he add an appendix at the end:

And I was going to write out how I answered the question except Siobhan said it wasn't very interesting, but I said it was. And she said people wouldn't want to read the answers to a maths question in a book, and she said I could put the answer in an Appendix, which is an extra chapter at the end of a book which people can read if they want to. (260)

Such comments on what should be included in a novel, or what readers might expect, reveal the narrator's preoccupation with abiding by certain generic standards, notwithstanding his breaking of generic conventions. In the end, he complies with his teacher's advice. Yet, paradoxically, the strategy to make the book more readable is to resort to an appendix, another academic resource which is also alien to fiction writing. His inclusion of the definition of what an appendix is in his own book also reinforces this metadiscursive drive, so typical of academic/scientific registers, which characterizes him as a narrator. Hallet cleverly asserts that multimodal fiction problematizes the widespread belief that the scientific thinking realized in the formal language and scientific references which characterize the argumentative mode is opposed to or different from the narrative mode (held by Bruner in 1986, or Ryan in 2004, for instance). In Haddon's novel, Christopher's "scientific ways of conceptualizing and representing the world are narrativized" (Hallet, 2009: 136), and thus, by displaying the protagonist and narrator's unique way of conceiving reality, such scientific discourses become essential in the making up of the narrative.

Indeed, it is the combination of discourses borrowed from the scientific field and other semiotic resources, which range from simple drawings to the mere way of labeling chapters, that allows the narrative to develop multimodally and makes meaning possible in non-traditional ways. In view of the work which still needs to be done in the field (Hallet, 2009: 151; Maziarczyk, 2012: 120; Nørgaard, 2009: 159; White, 2005: 207), and the increasing profusion and diversity of literary forms of this kind in recent years, this study can hopefully throw new light upon the diverse and significant ways in which the strategic disruption of the graphic surface operates in fiction. "To dismiss such techniques as gimmicks, or to refuse to take them seriously, is crassly to miss the point" (Johnson, 1987: 176).

References

- ANDERSON, Jeanne (2008). *Asperger's Syndrome*. New York: EZ Guides. Medical Series.
- BENSTOCK, Shari (1990). "At the Margin of Discourse: Footnotes in the Fictional Text." *PMLA* 90.2: 204-225.
- BRUNER, Jerome. 1986. *Actual Minds, Possible Worlds*. Cambridge, MA: Harvard University Press.
- CHIANG, Hsu-Min, and Yueh-Hsien Lin (2007). "Mathematical ability of students with Asperger syndrome and high-functioning autism. A review of literature." *The National Autistic Society* 11.6: 547-556.
- DODGE, Yadolah (2008). The Concise Encyclopedia of Statistics. New York: Springer.
- DRUCKER, Johanna (2008). "Graphic Devices: Narration and Navigation." *Narrative* 16.2: 121-139.
- EFFRON, Malcah (2010). "On the Borders of the Page, on the Borders of the Genre: Artificial Paratexts in Golden Age Detective Fiction." *Narrative* 16.2: 199-219.
- GIBBONS, Alison (2012). "Multimodal Literature and Experimentation." The Routledge Companion to Experimental Literature. Eds Joe Bray et al. London: Routledge. 420-434.
- HADDON, Mark (2004). The Curious Incident of the Dog in the Night-Time. London: Vintage Books.

- HALLET, Wolfgang (2009). "The Multimodal Novel: The Integration of Modes and Media in Novelistic Narration." Narratology in the Age of Cross-Disciplinary Narrative Research. Eds Sandra Heinen, and Roy Sommer. New York: Walter de Gruyter. 129-153.
- HIRSCH, Marianne (2004). "Editor's Column: Collateral Damage." *PMLA* 119.5: 1209-1215.
- HUTCHEON, Linda (1980). Narcissistic Narrative: The Metafictional Paradox. Waterloo, Ont: Wilfrid Laurier University Press.
- JOHNSON, B. S. (1987). Albert Angelo. London: New Direction Books [1st ed. 1964].
- KEYES, Daniel (2004). *Flowers for Algernon*. Orlando: Harcourt Inc. [1st ed. 1966].
- KUTNIK, Jerzy (1986). The Novel as Performance: The Fiction of Ronald Sukenick and Raymond Federman. Carbondale: Southern Illinois University Press.
- LITT, Toby (2003). Finding Myself. London: Hamish Hamilton.
- MAZIARCZYK, Grzegorz (2011). "Print Strikes Back: Typographic Experimentation in Contemporary Fiction." *The Metareferential Turn in Contemporary Arts and Media: Forms, Functions, Attempts at Explanation.* Eds Werner Woolf, Katharina Bantleon, and Jeff Thoss. Amsterdam: Rodopi. 169-194.
 - _____ (2012). "Towards Multimodal Narratology." Interfaces: Image, Texte, Language 32: 111-125.
- MCHALE, Brian (1987). Postmodernist Fiction. New York: Methuen.
- NABOKOV, Vladimir (1962). Pale Fire: A Novel. New York: Putnam.
- NØRGAARD, Nina (2009). "The Semiotics of Typography in Literary Texts. A Multimodal Approach." Orbis Litterarum 64: 141-160.
- RYAN, Marie-Laure, ed. (2004). Narrative across Media: The Languages of Storytelling. Lincoln, NE: University of Nebraska Press.
- SEEL, Norbert M., ed. (2012). Encyclopedia of the Sciences of Learning. New York: Springer.
- SPIEGELMAN, Art (2004). In the Shadow of NoTowers. New York: Knopf Doubleday Publishing Group.
- WHITE, Glyn (2005). Reading the Graphic Surface: The Presence of the Book in Prose Fiction. Manchester, UK: Manchester University Press.

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