Jeu de miroirs between medical illustration and art

Bernard Dan*

Department of Neurology, Hôpital Universitaire des Enfants Reine Fabiola, Free University of Brussels (ULB), Brussels, Belgium

Received 7 April 2005 Accepted 8 April 2005

It is 40 years since Angelman syndrome was first described [1]. Without any reference to this anniversary in medical literature, the starting line of a powerful contemporary poem states that 'Dopey has Angelman's' [2]. This appears to constitute a further avatar in the complex interplay between art and medical communication.

Medical illustration is primarily based on artifacts that are specially designed to depict salient aspects of medical conditions. These range from simple sketches to elaborate plates, from photographs to film footages, and from actual 3D to virtual computerized animation. In addition, medical illustration occasionally draws upon all forms of art, borrowing images produced with no reference to medicine for their descriptive traits. To cite but a few neurological examples, Pieter Breughel's paintings of characters with cramped grimace have provided an alternative eponym for cranial dystonia; the Judges' Samson was reinterpreted by Newsom-Davis as a literary account of myasthenia gravis; possible epilepsy has been trailed through countless movies [3]. Thus physicians have revisited books, theaters and art museums as though they were Spitzner museums. Mirroring the playwright's claim that all the world is a stage

and men and women merely players, do they believe that it is a hospital and people just patients? Do they suffer from the 'oracle syndrome' described by artists, overinterpreting any feature as a clinical sign? Or do they mildly look for widely available imagery to bring obscure conditions into the broad daylight? Furthermore, people with medical conditions have been the conscious subject of numerous works of art. In turn, the more famous of these, like Barry Levinson's Rain Man, have been amply used by doctors and patients to support medical information in lay contexts. This approach has the advantage of being set in a shared cultural context, therefore reducing the sense of mystification that may be associated with medical jargon. The mere evocation of such work captures imagination with a host of dramatic details, including those with light, humoristic, affectionate or otherwise positive connotation. Nemo's 'lucky flipper' in Walt Disney's Finding Nemo is recent example in the field of pediatric neurology.

The case of Angelman syndrome is remarkably illustrative of the resonant interplay between medicine and art. It is reminiscent of Peretz's tale *Gilgul fun a nign*, whose main character is a melody that undergoes metamorphosis with each new encounter, both informing and forming each person it meets. Harry Angelman, a British pediatrician, had among his patients three unrelated children with severe developmental delay, no speech, a flat head, a protruding tongue,

^{*}Correspondence: Bernard Dan, MD, PhD, Department of Neurology, University Children's Hospital Queen Fabiola, 15 Avenue JJ Crocq, 1020 Brussels, Belgium. Tel.: +32 2 4773174; Fax: +32 2 4772176; E-mail: bernard.dan@ulb.ac.be.



Fig. 1. Ritratto di fanciullo con disegno. This painting by Giovanni Francesco Caroto (1480–1555) gave Harry Angelman the idea of reporting the first cases of the syndrome that bears his name as 'Puppet' children [2].

jerky movements and bouts of laughter. He was struck by their similar features and wondered whether these could justify combining them into a specific group of yet unknown cause. When he was visiting the Museo di Castelvecchio in Verona, he experienced a critical encounter with Giovanni Francesco Caroto's painting Ritratto di Fanciullo con Disegno (Fig. 1). The boy's laughing face and the fact that his patients exhibited jerky movements gave him the idea to write an article about the three children with a title of Puppet Children. In this seminal paper [1], he explained that although the superficial resemblance to puppets was unscientific, it would at least ease identification of the new syndrome. The ball was back in the court of medicine. Several hundreds of patients have been identified, and the complex genetics of the syndrome finely described. Then, it was suggested that an illustration of Angelman syndrome could be found in Walt Disney's Snow White and the Seven Dwarfs. Although there is no evidence that the animation was inspired by a disabled person, it was contended that 'like most patients with Angelman syndrome', Dopey has no speech but good understanding of speech and eagerness to communicate, using efficient mimic and gesture. He has intermittent strabismus, prominent nose and chin, wide smiling mouth and a tendency to protrude his tongue. He has a happy disposition, enjoys playing jokes and tricks, and he can be overwhelmingly affectionate. He tends to flap his ears when he is content, an unusual variant to the hand flapping classically seen in Angelman syndrome. He has a wide-based, hopping gait with a tendency toward elbow flexor attitude. He has occasional myoclonic jerks, tremor facilitated by emotion and had a clonic seizure during his sleep. Moreover, although Dopey is presumably unrelated to the other dwarfs, it may be noteworthy that he is the only one with blue eyes and that his head is smaller. When it comes to washing hands, he finds himself completely immersed in the basin, a scene that is familiar to many parents of a child who has Angelman syndrome. The point was made that the character of Dopey is highly appealing and it might serve the purpose of spreading the knowledge of Angelman syndrome among physicians and caregivers. This appeared in the medical literature [4,5].

Recently, Richard Price, an 'informationist' poet who is currently Head of Modern Collections at the British Library, borrowed the same image to compose verses under the title *Dopey has Angelman's syndrome*, swinging it back to the world of art. This poem was published as part of the *Hand Held* sequence collected in *Lucky Day* [2] 40 years after Doctor Angelman's report [1]:

Dopey has Angelman's, keeps mum – plays his days with rubies, all innocent fun. Dopey's dopey – the drugs he's on. Dopey has Angelman's, fits at night. He's got Doc and Happy and Miss Snow White.

Acknowledgements

We thank Dr. Richard Price, Head of Modern Collections at the British Library, London (United Kingdom), for authorizing reproduction of his poem and Dr. Francesca Rossi, curator of the Museo di Castelvecchio, Verona (Italy) for authorizing reproduction of Caroto's painting.

References

- H. Angelman, 'Puppet' children: A report on three cases, *Dev* Med Child Neurol 7 (1965), 681–688.
- [2] R. Price, Lucky day, Manchester: Carcanet Press, 2005.
- [3] S. Baxendale, Epilepsy at the movies: possession to presidential
- assassination, Lancet Neurol 2 (2003), 764-770.
- [4] B. Dan, Original animated depiction of Angelman syndrome, *Eur J Paediatr Neurol* 4(A2) (1997), (abstract).
- [5] B. Dan and F. Chistiaens, Dopey's seizure, *Seizure* **8** (1999), 238–240.