

A single case report of recurrent surgery for chronic back pain and its implications concerning a diagnosis of Münchausen syndrome

Camilla Callegari
Paola Bortolaso
Simone Vender

Department of Medicine, University of Insubria, Varese, Italy

Reprint requests to: Dr Camilla Callegari
Dipartimento di Medicina Clinica
Università degli Studi dell'Insubria
c/o SPDC Ospedale di Circolo
Viale Borri, 57 - 21100 Varese - Italy
E-mail: camilla.callegari@uninsubria.it

Accepted for publication: December 28, 2005

Summary

While undergoing treatment in the psychiatric department, A.C., a 40-year-old white male, who had arrived in the casualty department complaining of an uncontrollable anxiety attack and in a state of fluctuating consciousness, was found to be suffering from a psychopathological condition characterized by pathological lying, gambling, compulsive restlessness, a long clinical history of chronic back pain, with multiple invasive diagnostic investigations and repeated surgery for disc hernia with relative complications, culminating in the fitment of a fixed neurostimulator, a slow-discharge morphine pump and the patient being granted a full disability pension. The continual increases in the doses of morphine suggested a tendency towards drug addiction.

After providing a brief overview of the historical background and current concepts relating to the relationship between factitious disorders, malingering and hysteria, the authors discuss the differential diagnosis of the case, suggesting a diagnosis of Münchausen syndrome (the hypothesis best supported by the clinical evidence). This diagnosis, although the subject of much academic debate, is, unfortunately, still not frequently encountered in the medical literature, with the result that even today it has a strong clinical, relational and social impact.

KEY WORDS: chronic back pain, factitious disorders, malingering, Münchausen syndrome, recurrent surgery.

Introduction

Factitious disorders are characterized by voluntary behavioural patterns intended to produce both physical

and psychological symptoms that simulate various types of illness. This behaviour has no apparent advantage for the individual concerned, other than allowing him or her to play the sick role.

Over the years, these disorders have been given various names, such as Lasthénie de Ferjol syndrome (1), "patomimie", and "dermatomimie", but the most well known by far is Münchausen syndrome (2). Although Asher (3) applied this name to just one specific form of factitious disorder, characterized by pathological lying (pseudologia fantastica), wandering from hospital to hospital, and simulation (conscious or unconscious) of illness, in recent years it has become, in practice, synonymous with the much broader term, factitious disorders. Since these patients' case histories are often fabrications, their symptoms feigned, and the details of their lives and illnesses pure invention, the problem of deceit in disorders of this kind has always been a focus of considerable attention. "Simulate", coming from the Latin *simulo*, derived from *similis* meaning "to make similar, imitate, assume the aspect of, feign, pretend", means manifesting feelings that, in reality, one does not feel (4). Strictly speaking, therefore, factitious patients simulate, but the question of whether or not they can be considered deliberate simulators, or malingerers (in relation to what is meant by normal versus pathological simulation) remains open.

The spectrum of factitious disorders has been defined on the basis of a limited number of descriptions of individual clinical cases, and set out in a nosographic classification (5). The question of the connection between hysteria and simulation has been discussed at length, with factitious disorders first attributed to malingering, and then to hysteria. Later, they were placed on a continuum with these disorders (6) (Table I, over).

Even as early as 1908, Dieulafoy (7) described a patient with gangrenous wounds that had been self-inflicted using caustic soda. He was convinced that this new pathology was a particular form of simulation, distinct from somatic hysterical symptoms. Whereas Corradini, in 1962 (8), came to the conclusion that the psychopathological traits of the pantomimics bore a fundamentally hysterical hallmark, Bursten (9) underlined their distinctive elements with respect to hysteria, while both Spiro (10) and Cramer (11) emphasized the fact that the relationship between hysteria, factitious disorders and malingering was poorly defined, in that the clinical cases observed, including those of factitious disorders, all revealed traits typical of hysteria. It is by no means easy to separate deceit from hysteria, of which malingering is frequently a component. Other authors (12,13) excluded an overlap between factitious disorders and hysteria on account of the voluntary intent with which factitious patients inflict wounds on themselves.

Others, such as Prasad and Oswald (14), formed opinions relating to the course of the illness, suggesting that the subject's awareness that he is producing his own symptoms can vary over a period of time, rendering the boundary between hysterical conversion, feigned illness and malingering, in practice, somewhat blurred. Subsequently, some authors set factitious disorders apart from hysteria, seeing them as closer to malingering (15); others still put forward ideas that were the exact opposite of this interpretation, reviving the idea of a similarity between factitious disorders and hysteria, based on the fact that both these disorders have highly dramatic presentations (16).

A precise classification of factitious disorders was provided in DSM-III-R (17), and confirmed in DSM-IV (18) and DSM-IV-TR (19) (Table II), and it was based primarily on the evidence that, in malingering, a patient has voluntary control over his symptoms, which is exercised for external gain, easily identifiable in his current situation (for example, he may be seeking to avoid military service or work, to solve financial problems, or to obtain a reduction of a prison sentence, or compensation for damages).

These behavioural symptoms cease in the presence of real life or health risks, or of a low cost-benefit ratio, providing the malingerer is capable of making this type of evaluation. In one case of this kind, which received widespread publicity in Italy (2001), a young factory worker from the Veneto region procured, with the help of a friend, the amputation of a lower limb in order to receive compensation but subsequently bled to death. Factitious disorders, on the other hand, involve intentional behaviour whose unconscious objective is to allow the subject to play the sick role, a role characterized by

compulsiveness and by an inability, on the part of the patient, to stop producing the symptoms.

Hysterical disorders, no longer part of the DSM as a single nosographic denomination but now classified elsewhere under "conversion disorders" and "somatoform disorders", are involuntary and nurture intentions which are entirely unconscious.

Malingering is classified as a "condition that can be the object of clinical attention" or at least represents a type of adaptive behaviour, observed for example in situations of deportation or war imprisonment, without constituting a real psychiatric diagnosis (19).

The aspect of external gain as a discriminating factor in the diagnosis of malingering, favoured by the American authors of the DSM and others who have done an in-depth study into factitious disorders (20), has by no means met with unanimous agreement. Taking as his starting point the observation of clinical cases of patients suffering from trauma who, presenting genuine consequences both physical and psychological, honestly seek compensation, David Enoch (21) (Table III) suggested that, in Europe, the real key to the problem of the difference between malingering and factitious disorders lies in the state of consciousness/awareness, and of intentionality/volition. It is incorrect to differentiate conditions purely on the basis of final motivation, on the grounds that "malingering is conscious manipulation and therefore not an illness, while factitious disorder is unconsciously motivated and is equivalent to hysterical disorders or conversion disorders and consequently is a real illness" (21).

It is also interesting to observe how, in terms of potentially fluctuating or openly modified states of consciousness, some authors (22,23) (Table IV), when discussing

Table I - Historical background.

Dieulafoy 1908 (7) Attolini 1986 (15)	$\underbrace{\text{hysteria} \neq \text{factitious disorders} = \text{malingering}}$
Corradini 1962 (8) Py and Consoly 1989 (16)	$\underbrace{\text{hysteria} = \text{factitious disorders} \neq \text{malingering}}$
Bursten 1965 (9) Cheng and Hummel 1978 (12) Carney 1980 (13)	$\underbrace{\text{hysteria} \neq \text{factitious disorders} \neq \text{malingering}}$
Spiro 1968 (10) Cramer 1971 (11) Prasad and Oswald 1985 (14)	$\underbrace{\text{hysteria} = \text{factitious disorders} = \text{malingering}}$

The bibliographic references appear in parentheses.

Table II - From past debate to current concepts.

Somatoform disorders	Factitious disorders	Conditions that may be a focus of clinical attention
Conversion disorders 300.11	Factitious disorders 300.xx	Malingering V65.2
Unconsciously motivated	Unconsciously motivated Intrapsychic need to maintain the sick role	Consciously motivated by external incentive

Source: DSM-IV-TR (19).

the concepts of pseudodementia, an illness characterized by transitory clinical symptoms similar to those present in organic dementia such as cognitive deficit and attention and memory disorders, affective flattening and psychomotor inertia, include, in the differential diagnoses, other pathologies which could be responsible for dementia-like cognitive dysfunctions. These include hysteria, with varying levels of lucidity of consciousness (*Pseudemence Isterique de Wernicke*), conversion disorders, factitious disorders (Münchausen syndrome), Ganser's syndrome, and the feigning of mental illness. At the beginning of the last century, military doctors and psychiatrists defined the psychological consequences of cerebral trauma as an ideogenous "traumatic pseudodementia" (24). This ideogenous reaction was subsequently recognized as "unconscious deception" (25), or, by present day concepts, as factitious disorder as opposed to malingering, on the basis of these patients' internalization both of the presumed damage and of the question of related external benefit (compensation). The relationship with war trauma and with accidents in general presents similarities with Ganser's syndrome and with Wernicke's pseudodementia. Ganser's syndrome, characterized by approximate answers, altered consciousness and dream-like or twilight states, somatic or conversion symptoms, and a chronologically direct relationship with physical or emotional trauma, could correspond in the DSM-III-R (17) to factitious disorder with predominantly psychological symptoms or to factitious disorder with predominantly physical symptoms, on account of the frequent conversion symptoms.

Case report

A.C., a 40-year-old male, arrived at a casualty department one Monday morning complaining of uncontrollable anxiety and requesting a psychiatric examination. He had been on his way to work after taking his son to

school, but had not been able to face it and had instead decided to go to the hospital. None of his family knew of his decision. A.C. had been married for more than 10 years. He had a 7-year-old son; his mother, a widow, lived alone but was in close contact with A.C. and his family. He also had a brother, who led his own life. His father was dead. A.C.'s decision to seek psychiatric help was a last resort in a situation which had become emotionally untenable: in recent years he had contracted very heavy gambling debts, which his family had discovered only a few months earlier. Although, despite their understandable feelings of anger and shame, they had decided to stand by him and help him, he complained of insomnia and periods of depression, saying he felt confused, distressed and as though he were on a road with no hope of return. Due to the uncertainty and apparent gravity of the clinical picture, the consultant decided to authorize hospitalization, which A.C. willingly accepted even though he was worried about the reactions of his family, whom he feared would not agree with the decision. On somatic examination of the patient, scars were noticed on his back and abdomen, together with a neurostimulator and a fixed slow-discharge spinal morphine pump. What subsequently emerged was a long history of repeated surgical operations (more than 10) on the spinal column for a slipped disc. These had begun ten years earlier and had ended, following a series of sophisticated surgical interventions performed in an attempt to control the pain, with the insertion of a fixed analgesic system. The detailed clinical history was reconstructed later after consulting the clinical notes from the hospital archives that documented the patient's numerous hospital admittances over a period of thirteen years.

The patient's history, apart from the usual childhood illnesses, included tonsillectomy at the age of 3 years, a left internal meniscectomy at the age of 17 years, and the removal of an intra-articular cyst from the left knee at the age of 27 years. The patient's hospitalizations, mainly in the neurosurgical and orthopaedics departments, became more frequent around the age of 30. Initially the patient presented symptoms of a bilateral lumbar sciatalgia due to a right median and paramedian lumbar disc hernia, documented on CT scan, for which an operation, for removal of the hernia, was carried out with interlaminary access, apparently resolving the pain. A further acute phase of the symptoms, caused by a recurrence of hernia in the fourth right lumbar disc, necessitated a further operation. Following the operation, the patient was prescribed a semi-rigid corset, which partially alleviated the pain. Two years later, a further operation was performed to remove a recurrent

Table III - From past debate to current concepts.

Hysterical/Conversion disorders	Factitious disorders	Malingering
Unconscious Involuntary	Unconscious Voluntary Compulsive	Conscious Voluntary

Source: ref.s 21,28.

Table IV - From past debate to current concepts.

Hysterical or Conversion disorders Wernicke's hysterical pseudodementia	Factitious disorders Ganser's syndrome	Malingering of mental illness	Malingering
State of consciousness: fluctuating altered	State of consciousness: fluctuating	State of consciousness: fluctuating	State of consciousness: unimpaired

Source: ref.s 22,23,28,29.

hernia at L4-L5 and a year later, at the age of 33, following a sudden attack of right lumbar sciatalgia, A.C. again underwent an operation on L4-L5 for stenosis due to scarring as a result of the previous disc hernia removal. Two months later he was admitted yet again to the orthopaedics department with a further attack of lumbar sciatalgia, but electromyography of the right lower limb and a CT scan of the lumbar-sacral spine showed no signs of acute neurological deficit or a recurrence of the hernia. A year later, after a further, similar episode, MR imaging of the lumbar-sacral spine showed a recurrence of the disc hernia at L4-L5. While the patient was waiting to undergo an operation the use of a plaster cast was prescribed. Subsequently, the patient underwent L4-L5 arthrodesis using the Diapason system. In spite of this stabilizing operation, A.C. continued to complain of pain, but lumbar-sacral CT scan showed no evidence of recurrent hernias in the following periods of hospitalization one year and three years later (at the ages of 35 and 37). Most recently, in an attempt to eliminate the persistent lumbar sciatalgia, a posterior-lateral L4-L5 arthrodesis in abstraction with a Steffer plate had been carried out. A Boston-Brau type cast was then applied to correct posture when erect and seated. Due to yet another acute pain attack A.C. underwent a lumbar-sacral CT scan with contrast, injections of anaesthetic, and sacculariculography, and arachnoiditis and epidural inflammation were found to be present. A temporary epidural spinal dorsolumbar neurostimulator was therefore fitted. An appointment was then made with a pain therapy centre for the follow up of the patient and a further hospitalization was scheduled for one month later for the fitment of a fixed ITREL 3 neurostimulator in a subcutaneous pocket in the left abdomen. At the age of 38, A.C. was admitted to the neurosurgical department with a diagnosis of failed back syndrome and, after myelo-CT and myelography, epidural block anaesthesia was carried out to no effect. After the administration of a placebo there was a marked improvement in the pain symptoms, and morphine also had a positive effect. Meanwhile, pain therapists were contacted to fit a fixed slow-discharge morphine pump. Further hospitalizations ensued for neurostimulator and pump maintenance.

A.C. was officially recognized as disabled and accordingly took a part-time job as a disabled person. However, by the time of his admittance to the psychiatric department at the age of 41, he already had a long record of absences from work, which he had kept hidden from his family. At this point, a relational and existential situation became apparent, in which there was a tendency towards difficulty in controlling impulses, compulsive gambling, claustrophobic anxiety and an intolerable, confused mental state, described by the patient himself, in which he felt that he was losing control both of himself and of his thoughts. Symptoms of depression and personality disorder were noted and a diagnosis of Münchausen syndrome was proposed as compatible with the psychopathological picture and the clinical-surgical case history.

A.C.'s wife and mother were openly disapproving when they were informed of his admittance to hospital (on the day he turned up at the casualty department seeking psychiatric help) and of the fact that the doctors were convinced he was suffering from a serious emotional

disorder. The mother, especially, had been tolerant of the somatic illness and the resulting clinical procedures but could not accept a psychological disturbance on account of the shame involved in her son being admitted to a psychiatric department. In spite of their daily presence on the ward and constant complaints about the lies A.C. had told them, outside the hospital environment they mirrored A.C.'s behaviour by lying to his son, justifying his absence from home as 'being away on business' and continually asking to talk to the specialists without A.C. being present.

A.C.'s hospital stay was, however, brief and not long enough to allow either an in-depth analysis of his case, or, more importantly, the planning of an effective course of therapy. After a slight improvement in his state of anxiety, A.C., in response to his family's incessant demands (and probably also because he had heard that his doctors intended to consult with the orthopaedic specialists and neurosurgeons at the hospital where he had been treated), discharged himself. It was at this point that his past history was reconstructed from his clinical records. In the same way, further information, regarding his subsequent progress and admissions (to the orthopaedics and neurosurgical departments and, as a day hospital inpatient, to the general surgical department for the refilling of the morphine pump and fitting of new neurostimulators), was also obtained from hospital records.

Discussion

It is by no means difficult to imagine the disease course corresponding to much of the evidence reported in this paper. The clinical history, the symptoms, both at the time of the patient's admission to the psychiatric department and subsequently, and the carer and family dynamics all pointed to a diagnosis of Münchausen syndrome (factitious disorders). From this perspective, we may consider the repeated surgical operations (only the first two had really been necessary, due to a neurological deficit of foot dorsiflexion), which had been actively desired by the patient, as had recourse to invasive diagnostic techniques and treatments; we may also consider the patient's refusal to recognize/accept his psychopathology, which was characterized by pathological lying, gambling, morphine addiction, and fluctuating consciousness, and his compulsive actions and discharging of himself from hospital for fear of being found out. This diagnosis, which, in this particular clinical case, was supported by other descriptions of patients who had undergone multiple operations (26,27), would appear to be more likely than the other possible diagnoses, discussed below.

Somatic illness

A purely somatic illness was initially present, but appears to have been aggravated by the patient's intolerance of pain, and to have been the focus of an excessive number of surgical and clinical procedures and instrumental diagnostic investigations. The patient's very definite preferences as regards his therapy are probably what induced the team in charge of his case to opt for surgery, diagnostic investigations and invasive anti-pain tech-

niques in spite of the fact that: (i) very few recognized rehabilitation programmes had been implemented, either by the clinicians or the surgeons (which would be the normal approach in such a case, particularly in view of the young age of the patient); (ii) an objective neurological deficit of dorsiflexion of the foot (in regression after the operations) was present only in the case of the first two operations for disc hernia; (iii) the patient continued to manifest symptoms of the deficit together with a slight limp after the first six surgical operations but none of these symptoms was supported by any evidence of organic damage on CT scan or MR imaging; (iv) the continual increases in the dose of morphine released by the pump suggested a tendency towards drug addiction.

As a result, the patient underwent: surgical operations to remove adhesions (an approach questioned even by neurosurgeons themselves, since clinical experience shows that adhesions always recur); an apparently excessive number of procedures relating to the implantation of the epidural neurostimulator for pain therapy, due to the suspected diagnosis of arachnitis-epiduritis; and an excessive number of surgical operations, diagnostic and therapeutic.

Malingering

All things considered, the diagnostic criteria for malingering, aimed at some sort of social services compensation (although this was, in fact, obtained in the form of a disability pension) did not appear to satisfy the complexity of the symptoms, clinical, somatic and psychological, that this patient presented.

Factitious disorder

Although factitious disorder corresponded to the patient's symptoms more than the other possible diagnoses, it is still a highly ambiguous diagnostic label that does not denote an absolute correspondence either to a somatic or to a psychological pathology. It is a provocative and even scandalous diagnostic category because it is inherently paradoxical. Indeed it is a diagnosis:

- that contradicts the very idea of a nosography that allows you to identify and make distinctions;
- that clinicians can apply only in the awareness that it is useless to unmask the factitious patient because the unveiling of his illness has no therapeutic function at all (28);
- that reflects the impossibility of following a normal diagnostic and therapeutic course.

Table V - A paradoxical diagnosis.

A diagnosis that contradicts the very idea of a nosography that allows you to identify and make distinctions.

A diagnosis that clinicians can apply only in the awareness that it is useless to unmask the factitious patient because the unveiling of his illness has no therapeutic function at all.

A diagnosis that reflects the impossibility of following a normal diagnostic and therapeutic course.

In conclusion, there are many interesting elements relating to the evolution of this patient's picture. The mental state of intolerable confusion that the patient reported and attempted to describe, in which he had the impression of losing control of himself and of his own thoughts, might appear, to an external observer, to denote a state of fluctuating consciousness (reflected in both neurophysiological and in purely psychological alterations, in the qualitative parameters of identity and reality, and also in the disassociation that results in a self that is both actor and observer at the same time). In this dimension, all traces of the, by now remote, clinical history, the illness and life of the patient, the motivations, conscious or unconscious, that have led him to become a chronic patient, are lost. He is officially recognized as disabled and compensated for his disability, but this gives him no feelings of satisfaction, and he is still eager to play the role of the incurable patient.

Indeed, the lies, the pretence and the malingering that recur in continuation in this patient's case history and in the history of his interpersonal relations, even in the very presentation of his confused mental state, should, strictly speaking, be totally inadmissible to the sufferer. Yet he seems, consciously, to lie continually and, unconsciously, to sham with his family, his GP and other medical care providers, his colleagues and friends, in a way that is beyond all limits of normality and, which, despite the continual condemnation of his fraudulent and deceitful behaviour, becomes a relationship style that is shared (too readily and dangerously) by his family, and in which the truth, whatever it may be, is lost or replaced by a true/false reality which is acceptable to everyone.

References

1. Barbey d'Aureville (1882). Une histoire sans nom. Paris; Gallimard, coll. "Folio" 1972
2. Raspe RE (1785). Baron Munchausen's Narrative of his Marvellous Travel and Campaigns in Russia. Singular Travels, Campaigns and Adventures of Baron Munchausen. London; Cresset Press 1948
3. Asher R. Munchausen's syndrome. *Lancet* 1951;1:339-341
4. Vender S. Simulazione. In: Treccani G. L'Universo del corpo. Vol. 5. Rome; Istituto della Enciclopedia Italiana 2000
5. Callegari C. Storia e nosografia dei disturbi fittizi. In: Vender S. La maschera della finzione. Rome; Il Pensiero Scientifico Editore 1997
6. Callegari C. I modelli interpretativi dei disturbi fittizi. In: Vender S. La maschera della finzione. Rome; Il Pensiero Scientifico Editore 1997
7. Dieulafoy M. Escarres multiples et recidivantes depuis deux ans et demi aux deux bras et au pied. Amputation du bras gauche. Discussion sur la nature de ces escarres. *Pathomimie*. La Presse Médicale 1908;16:369-372
8. Corradini E. Un caso di patomimia. *Rivista Sperimentale di Freniatria* 1962;86:1017-1038
9. Bursten B. On Munchausen's Syndrome. *Arch Gen Psychiatry* 1965;13:261-268
10. Spiro HR. Chronic factitious illness. Munchausen's syndrome. *Arch Gen Psychiatry* 1968;18:569-579
11. Cramer B, Gershberg MR, Stern M. Munchausen syndrome. Its relationship to malingering, hysteria, and the physician-patient relationship. *Arch Gen Psychiatry* 1971; 24:573-578

12. Cheng L, Hummel L. The Munchausen syndrome as a psychiatric condition. *Br J Psychiatry* 1978;133:20-21
13. Carney MW. Artefactual illness to attract medical attention. *Br J Psychiatry* 1980;136:542-547
14. Prasad A, Oswald AG. Munchausen's syndrome: an annotation. *Acta Psychiatr Scand* 1985;72:319-322
15. Attolini E, Conri C, Moreau F, Etesse JP, Fleury B, Duclaux G. Pathomimie: une pathologie frontière. *Psychosomatique* 1986;8:45-59
16. Py C, Consoly SM. Pathomimie: du deuil impossible à l'équivalent conversif. *L'Evolution Psychiatrique* 1989;54:735-749
17. American Psychiatric Association. DSM-III-R Diagnostic and Statistical Manual of Mental Disorders, 3rd ed. Washington D.C.: APA 1987
18. American Psychiatric Association. DSM-IV Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Washington D.C.: APA 1994
19. American Psychiatric Association. DSM-IV-TR Diagnostic and Statistical Manual of Mental Disorders, 4th ed., Text Revision. Washington D.C.: APA 2000
20. Feldman MD, Ford CV. Patient or pretender: inside the strange world of factitious disorders. New York; John Wiley & Sons 1994.
21. Enoch D. "Patient or pretender: Inside the Strange World of Factitious Disorders" Views and reviews. *BMJ* 1994; 308:1174-1175
22. Scarsi FJ. Attualità del concetto di pseudodemenza. *Pol.it Psychiatry on line* 2002
23. Giberti F, Rossi R. Manuale di psichiatria. Padua; Piccin 1983
24. Bumke O. (1929) In: Scarsi FJ, Attualità del concetto di pseudodemenza. *Pol.it Psychiatry on line* 2002
25. Maglie (1940) In: Scarsi FJ, Attualità del concetto di pseudodemenza. *Pol.it Psychiatry on line* 2002
26. Chertok L. Surgical mania (the polyoperated patient) [Article in French]. *Ann Med Psychol (Paris)* 1972;2:491-505
27. Menninger K. Polysurgery and polysurgical addiction. *Psychoan Quart* 1934;3:173-199
28. Callegari C, Vender S. Munchausen's syndrome: its relation to malingering and hysteria. *Atti del Congresso Internazionale "Dissociation" St. Petersburg (Russia) 22-25 March, 2002. Psichiatria e Territorio* 2002;XIX:29-34
29. Callegari C, Vender S. Simulazione, disturbi fittizi, isteria: contiguità o diagnosi differenziale? Simposio "Il misterioso pianeta del corpo". XLIII Congresso Nazionale SIP "La conoscenza e la cura". Bologna 23 October 2003
30. Vender S. La maschera della finzione. Rome: Il Pensiero Scientifico Editore 1997