

## Hallucinations and their expression through art

**E. CUNNINGHAM DAX** AO, FRANZCP, FRACP

*Depicting their hallucinations in various forms of art gives patients a way of managing their hallucinatory experiences and doctors useful aids to diagnosis.*

Hallucinations are becoming more commonly reported in general practice, occurring in at least one in 20 of the general population.<sup>1</sup> Their increasing frequency is due to the ageing population and the associated sensory losses, and also, in younger people, due to drug taking and psychiatric illness.

Although often nonspecific and mixed, hallucinations can be useful aids to diagnosis, opening up a vast field of research into sleep, dreams, neuropsychiatry and clinical investigation. Their unexpected and strange occurrence is often distressing because of the belief of their association with insanity. Thus people are reluctant to divulge these experiences to relatives, friends, or even their doctors.

It is not surprising that hallucinations are expressed through art of various forms because their creative images are of such prominence. Nevertheless, the representation of hallucinations by art has rarely been used to investigate the disorders associated with hallucinations. The Cunningham Dax Collection of Psychiatric Art, a collection in Melbourne of about 9000 works collected since the early 1950s, includes some pictures, drawings, models and embroidery known to have been constructed by patients with hallucinations, and many others that appear to have a similar origin.<sup>2</sup>

### The ageing population

The Charles Bonnet syndrome was written about over 100 years ago as being a condition of hallucinations associated with ageing. It is not necessarily associated with sensory deprivation. However, recent studies have shown that generally pleasant or neutral visual hallucinations occur in about 11% of normal but visually impaired aged people.<sup>3,4</sup> Moreover, many aged people show signs of dementia with confusion and hallucinations and so mix imagination with reality.

Some of the depictions of visual hallucinations contained in the Cunningham Dax Collection show faces appearing in the clouds or sky, often half hidden and mysterious (Figure 1); others seem to be accusatory and have a sexual significance.



CUNNINGHAM DAX COLLECTION - 2000.137

Figure 1. Depictions of visual hallucinations often show faces appearing in clouds or the sky.

Hallucinations used to be common in elderly patients with advanced cataracts but are becoming rarer with the improved treatment of this eye condition. Such hallucinations tended to be visual and pleasant, like daydreams, because of the patients' inactivity.

Today, macular degeneration is increasing in both frequency and importance, and about 12% of those affected experience visual hallucinations.<sup>5</sup> These hallucinations have been described as flashes of light, shapes of various colours and, sometimes, quickly disappearing objects. One patient saw coloured circles that fell slowly, and also bright lights, spiders, blobs, rodents and small dots; occasionally these objects would be well organised.

Hallucinations are also reported in those in whom deafness is developing, although to some extent they have been counteracted by the use of hearing aids. Deaf people may mistakenly complete sentences or remarks they have only partially heard, and the irritability, suspiciousness and impatience on the deaf person's part that can arise from this may lead to paranoid states that are supplemented by hallucinations. Such hallucinations are usually auditory in type, but there may be transitory flashes of light, colour and shapes similar to those seen in some forms of organic disorders (see Figure 2).

### The general population

#### Sensory deprivation

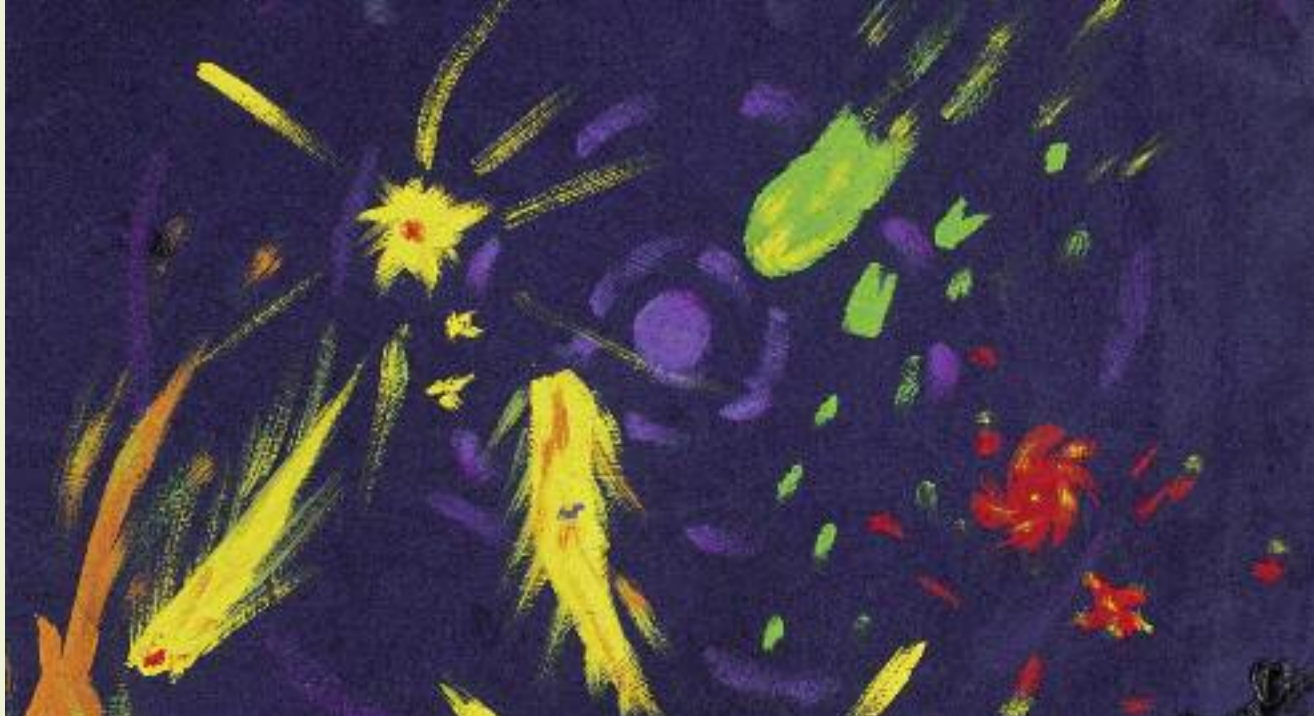
It is well recognised that hallucinations occur in sensory deprivation, particularly in the areas of hearing and sight, although they do occur in the tactile, olfactory and gustatory fields. They are often used to fill in the gaps left by the person's deficiency of sensations, and have been likened to phantom limbs (Dr W. Heriot, personal communication).

#### Organic and neurological disorders

Hallucinations have often been described in association with organic disorders – such as the auras of migraine and epilepsy. Hallucinogenic experiences also occur in conditions where blood sugar levels are low, such as after periods of extreme stress, including starvation, exposure and sleep deprivation.

The hallucinations associated with organic disorders may

Dr Dax is Founder and Curator of the Cunningham Dax Collection of Psychiatric Art, Parkville, Vic.



CUNNINGHAM DAY COLLECTION - 1999.280

Figure 2. The hallucinations of patients with neurological disorders are typically depicted as fleeting coloured shapes and designs.

be valuable aids to diagnosis as they may indicate the location of a space-occupying lesion. This is particularly true in the case of temporal lobe disturbances where there are olfactory and sometimes gustatory hallucinations – such as occur in uncinate fits. In contrast, foci in the occipital region are associated with various visual phenomena.

Hallucinations have been described in neurological disorders, such as Huntington's chorea, general paralysis and cerebral arteriosclerosis, and in infections and trauma involving the nervous system. They tend to be repetitive, featuring fleeting coloured shapes such as circles or stars; flashes of light are also often seen. A typical vivid visual hallucinatory experience is depicted in Figure 2.

### Psychiatric disorders

The auditory hallucinations of psychiatric disorders are well known. They may occur early in a schizophrenic illness or may be preceded by features such as a lower level of occupational and social participation, a change of character, illogicality and inappropriate affect. Interruption of conversation or attention becomes noticeable because hallucinatory messages may interrupt the continuity of thought or action.

Hallucinations may also occur in association with guilt feelings and accusatory delusions in serious depression. Under these circumstances, they are generally auditory and add to the misery of the condition. They may also occur in bipolar illnesses.

### Drugs

The use of illicit drugs may complicate a hallucinatory condition or, indeed, cause it. Many people admitted to hospitals for psychiatric conditions have a history of drug taking, and their treatment consequently becomes more complicated.<sup>6</sup> Glue sniffing and solvent and inhalant abuse should be considered in the differential diagnosis or aetiology of hallucinatory experiences of young people.

The intake of large amounts of various drugs will produce acute delirium-like symptoms. Such states are seen with cannabis or the amphetamines but the best known is the acute phase of alcohol withdrawal, delirium tremens, with its often fearful auditory, tactile and visual hallucinations – for example, threatening snakes and coloured animals.

### Managing hallucinations

Patients try to control their hallucinations in many ways: they may become accustomed or tolerant to them, gain insight, seek help, or find other ways to obliterate or oppose them.<sup>3</sup> Patients with schizophrenia may attempt to counteract them by aggressive behaviour in response to imaginary threats or orders, or by shouting them down.

Complete physical examination of affected persons may show the possible cause of their hallucinations. If there is no gross underlying disturbance the doctor is often able to reassure the patient by explaining about the frequency of hallucinations in the normal population, especially among the aged, and the effects of sensory impairment. To most patients this will seem a rational explanation of their problems, and their anxiety will be relieved. Encouraging the patients to discuss their symptoms in detail may help considerably. Medication may be necessary in some cases.

### Relief through creative expression

The psychiatric illnesses of famous artists such as Goya, Blake and van Gogh have been described by analysis of their works. At least 11 of van Gogh's supposed psychiatric disorders have been described, all with hallucinatory components.

Some schizophrenic patients obtain relief from their hallucinations by depicting them in art. They convert the abstract into the concrete by 'fixing' the hallucinations by modelling, drawing or painting them so they are captured instead of being free-floating. The patients also concentrate on the control of a single subject instead of following diffuse experiences by bringing

CUNNINGHAM DAX COLLECTION - 2000.146 AND 2000.147



Figure 3. Candlewax models of persecutors' faces made by a patient with a schizophrenic illness.

CUNNINGHAM DAX COLLECTION - 2000.145



Figure 4. A plaster model of six heads joined together: fusion of opposing schizophrenic thoughts stops them being antagonistic and simplifies their description.

CUNNINGHAM DAX COLLECTION - 1999.281



Figure 5. A schizophrenic patient's depiction of his auditory hallucinations: covering of the ears suppresses imagined noises.



CUNNINGHAM DAX COLLECTION - 2001.170

Figure 6. A painting of a group of earless heads: the bringing together of images focuses control of the artist's hallucinations and the lack of ears means voices cannot be heard.

together a number of their hallucinations. One of my past patients, aged in his forties, with a chronic schizophrenic illness in which he constantly hallucinated showed such behaviour. He believed that people congregated at the bottom of his garden and shouted at him. He spent his time in a psychiatric hospital modelling their faces in candlewax (Figure 3) and then putting them in a cloth bag which he carried around with him, no longer worried because he had captured the people. As fresh voices suggested new persecutors, he would dispose of them in the same way.

Fusion is another common way of avoiding anxiety: if two or more opposing thoughts are fused or agglutinated, then they cease to be antagonistic. A patient with a schizophrenic illness constructed the plaster model of six heads joined together shown in Figure 4. Modelling, like finger painting, has the advantage of direct contact between the artist and the medium used; with closer expression in consequence.

Hallucinations may also be avoided. For example, imagined noises believed to come from outside the person may be suppressed by covering the ears. A man in his late twenties with a schizophrenic illness and who was worried by voices painted the picture of a man covering his ears shown in Figure 5.

Figure 6 is a remarkable picture painted by an artist with hallucinations. It shows dual features: the heads of many of the people thought to be responsible for the artist's auditory experiences are brought together into a single picture to focus control of the hallucinations – and the faces are painted without ears, so voices cannot be heard.

## Editor's comment

Many years ago my mother told me that when she was an adolescent living in the country she and some of her siblings went out and gathered mushrooms. They cooked them, ate them and to their surprise saw lots of 'coloured pictures'. I added this to my own hallucinatory experiences – the teichopsia of migraine, hearing footsteps when paralysed with sleep paralysis associated with exhaustion while in the army, and the effects of propranolol. Years ago my physician of the day prescribed the drug for me: one of its effects was that sometimes when I woke in the night I would find strangers standing beside my bed – they were kind enough to disappear silently after a few seconds. Another visitation I have experienced was seeing, when I was a child with a high fever, my mother come prancing in through the doorway in a bright yellow nightdress, only to vanish equally suddenly.

My patients have had a much wider range of experiences. There have been, of course, those with the accusing voices of schizophrenia and deep depression, and those with the marvellous and complex hallucinations of temporal lobe dysrhythmia. Users of cocaine have complained of bugs crawling around under their skin, and those who had suddenly given up heavy intakes of alcohol came along pursued by green tigers and other unusual fauna. Less common is alcoholic hallucinosis, in which the hallucinations persist after the acute phase of the illness, even when the patients have insight into their unreality. They cease in the end: one of my colleagues had a patient who was followed everywhere by a hippopotamus for the best part of a year.

Gustatory hallucinations are uncommon but may occur in schizophrenia of late onset. One of my patients knew that his colleagues

were urinating in his teapot because he could taste it in his tea.

Olfactory hallucinations not infrequently occur in 'mass hysteria'. There have been many examples over several centuries. The most recent known to me was in Tennessee in 1998.<sup>1</sup> A 'gasoline-like' smell caused 80 students and 19 staff members to be taken to the local hospital's emergency department, and 38 were hospitalised overnight. Five days later another 71 went to the emergency department. Extensive investigation of the environment and the 'victims' found no toxin.

There can be other causes of mass hallucinations. Some years ago I was summoned urgently to the waiting room of the eye clinic at a large teaching hospital. To the dismay of the doctors several of their elderly patients had suddenly gone 'mad'. Many of them were not only very agitated but also seeing things that were not there. Some questions about the strength of the atropine eye drops and the possible effects of an error in their constitution unravelled the mystery.

Hallucinations are much more common than you might think. If you do not ask about them, you are not likely to hear about them. Dr Dax has a marvellous collection of paintings and other works of art showing how illness can distort perception, and we are very pleased to show you some of them.

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John Ellard AM, RFD, FRACP, FRANZCP, FRCPSYCH, MAPSS

## Psychiatric art as a research tool

The creation of art of many forms by anxious patients seeking relief by creative expression from their psychiatric disorder is not uncommon but has rarely been described. Asking patients with hallucinations to draw sketches of their experiences would help clarify the origin of the hallucinations and widen the whole field of their study. It is usual to inquire about the sleeping habits of the many elderly patients seen in general practice, but maybe we should also ask whether they have hallucinatory experiences. If they do, we will be helping relieve their anxiety and also gaining an opportunity to learn more about this aspect of geriatric study.

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