

# In a spin: the mysterious dancing epidemic of 1518

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**In 1518, one of the strangest epidemics in recorded history struck the city of Strasbourg. Hundreds of people were seized by an irresistible urge to dance, hop and leap into the air. In houses, halls and public spaces, as fear paralyzed the city and the members of the elite despaired, the dancing continued with mindless intensity. Seldom pausing to eat, drink or rest, many of them danced for days or even weeks. And before long, the chronicles agree, dozens were dying from exhaustion. What was it that could have impelled as many as 400 people to dance, in some cases to death?**

## The dancing plague

Perched alongside the Rhine River on the western edge of the Holy Roman Empire, Strasbourg was a busy trading city, its fairs frequented by merchants from across the continent (Figure 1). Some time in mid-July 1518 a lone woman stepped into one of its narrow streets and began a dancing vigil that was to last four or even 6 days in succession. Within a week another 34 had joined the dance. And by the end of August, one chronicler asserts, 400 people had experienced the madness, dancing wildly, uncontrollably around the city [1,2,4,5].

As the dance turned epidemic, troubled nobles and burghers consulted local physicians. Having excluded astrological and supernatural causes, the members of the medical fraternity declared it to be a 'natural disease' caused by 'hot blood' [2,4,5]. This was orthodox physic, consistent with Galen's view that bloody fluxes could overheat the brain, causing anger, rashness and madness. But the response of the authorities was neither to bleed nor to provide cooling diets. Instead they prescribed 'more dancing'. To this end they cleared two guildhalls and the outdoor grain market and they even had a wooden stage constructed opposite the horse fair. To these locations the dancers were taken so they could dance freely and uninterrupted. The victims would only recover their minds, said the authorities, if they persisted both day and night with their frantic movements. And to facilitate this supposed cure, the authorities next paid for musicians and professional dancers to keep the afflicted moving.

Every time the sick flagged, fainted, stumbled or slowed, the musicians raised the tempo of their playing and hired dancers held them firm and quickened their pace (Figure 2). 'They danced day and night with those poor people', one eye-witness recalled [1,2,4]. In grain market and horse fair, the elites had created spectacles every bit as

grotesque as a Hieronymous Bosch canvas portraying human folly or the torments of Hell.

Only after those with weak hearts or prone to strokes began to die did the governors rethink their strategy. Deciding that the dance had nothing to do with putrefying blood cooking normally moist and cool brains, they now saw it as a curse sent down by an angry saint. Hence, a period of organised contrition was instituted: gambling, gaming and prostitution were banned and the dissolute driven beyond the city gates. Soon after the dancers were despatched to a mountaintop shrine in the Vosges mountains to pray for divine intercession. There they were led around an altar, wearing red shoes provided for the ceremony, upon which stood a bas-relief carving of St. Vitus, the Virgin and Pope Marcellus. In the following weeks the epidemic abated. Most of the dancers, we are told, regained bodily control [1,4].

By any standards this was an unusual chain of events. In trying to make sense of it we can draw on a range of chronicles, sermons, and civil, ecclesiastical and medical accounts. There are also descriptions of similar outbreaks in previous centuries. For while terrifyingly bizarre, the events of 1518 were not unique. In fact, there had been as many as seven epidemics of uncontrollable dancing in various parts of western Europe before 1518, from Saxony and Maastricht to Basel, Zurich and Strasbourg. Explaining why these outbreaks occurred is more than a parlour game for medical historians. The phenomenon of compulsive dancing significantly enriches our understanding of the late medieval worldview. It also has much to teach us about some of the most extraordinary potentials of the human unconscious.

## Ergot and epidemiology

The medieval dancing epidemics were not unrelated events: they were linked both in time and space. Every one of the ten or so outbreaks between the late 1300s and 1518 happened along the Rhine and Mosel rivers. In 1374, for instance, the crazed dance gradually spread out from an epicentre around Aachen, Liege and Maastricht to neighbouring towns such as Ghent, Utrecht, Metz, Trier and, eventually, Strasbourg. Moreover, outbreaks of compulsive dancing virtually always struck in or close to places affected by earlier outbreaks. Maastricht, Trier, Zurich and Strasbourg each experienced two or more episodes. There are also several reports of compulsive dancing after 1518. All of these, crucially, took place close to the Rhine, and all but one within a short ride of Strasbourg itself [4].

How can we explain this striking epidemiological picture? One suggestion is that wild dancing formed part of

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**Figure 1.** Half bird's-eye view of Strasbourg by Franz Hogenberg, contained in Georg Braun and Hogenberg's *Civitates Orbis Terrarum* published in 1572.

the ecstatic ritual of a heretical sect, an energetic counterpart of the flagellant's cult [3]. There are two main difficulties with this theory. First, in lucid moments the dancers implored bystanders and priests to come to their aid. There is absolutely no evidence that the dancers



**Figure 2.** An engraving of three women affected by the dancing plague, each supported by two men, by Henricus Hondius the Younger (1573–1610) after a pen and ink sketch by Peter Brueghel the Elder. The engraving is based on an original drawing by Brueghel who witnessed, in 1564, just such a scene near Flanders. Brueghel added the note: 'These are the pilgrims who were to dance on St. John's Day at Muelebeek outside Brussels, and when they have danced over a bridge and hopped a great deal they will be cleansed for a whole year of St. John's disease'. It seems that the dancing plague had now been transformed into a possession cult.

wanted to dance. On the contrary, they expressed fear and desperation. Second, the authorities consistently saw the afflicted not as heretics but as the victims of diabolical possession or divine curse, and treated them accordingly. The dancers were subject to exorcisms or sent on pilgrimages. Never were they hauled before the inquisition.

Other authors, such as Eugene Backman [1], have sought a chemical or biological origin for the dancing mania, and the chief contender has been ergot, a mould that grows on the stalks of damp rye. While seductively simple, this hypothesis is also untenable. The chemicals contained in ergot do not allow for sustained dancing. They can certainly trigger violent convulsions and delusions, but not coordinated movements that last for days.

Yet while the dancers were free from ergot, they almost certainly were delirious. Only in an altered state of consciousness could they have tolerated such extreme fatigue and the searing pain of sore, swollen and bleeding feet. Moreover, witnesses consistently spoke of the victims as being entranced, seeing terrifying visions and behaving with wild, crazy abandon. So what could have plunged hundreds of people into trances so deep that remorseless dancing became possible? Psychologists, neurologists and anthropologists have identified severe psychological distress as a factor increasing the likelihood of an individual entering an altered state [6]. It is unlikely to be a coincidence, therefore, that in the year 1518 many people in Strasbourg were experiencing truly exceptional levels of hunger and mental anguish.

### Hard times

One has to be cautious in attributing unusual events in late medieval Europe to economic hardship, disease or violence. After all, most of the time harvest failure, plague and war did not precipitate social crises or mass hysteria. Nevertheless, even in a period accustomed to fear and deprivation, the decades preceding the dancing epidemic of 1518 were memorable for their harshness.

There were serious famines in and around Strasbourg in 1492, 1502 and 1511. Terrible cold, scorching summers, hailstorms and sudden frosts ruined fields of grain, pulverised fruits and vegetables, and blistered ripening grapes. These were disasters to the lower echelons of Strasbourg society, made all the worse by the fact that since the mid-fifteenth century landlords had been shoring up their declining incomes by turning free peasants into bound serfs, imposing harsh new taxes, and abolishing the traditional rights of peasants to fish in ponds and streams and to hunt game in woods. The suffering of the poor would intensify in the succeeding years.

In the summer of 1516, the sun beat down mercilessly upon ripening crops. Few people in Strasbourg and its environs had ever had to pay such high prices for their bread. Farmers, craftsmen and artisans quickly exhausted what meager supplies they had. They were then hit with a ferocious winter. In the New Year, famine struck with terrible force. Waves of deaths followed from malnutrition. Reflecting on the great mortality of 1517, one chronicler dubbed it briefly, but poignantly, 'the bad year' [4].





**Figure 3.** From the title page of a 1496 pamphlet on syphilis written by the Strasbourg humanist Sebastian Brant. The Christ child, cradled by his mother, is hurling down shafts of disease upon a group of sinners, their skin riddled with foul sores, one of them already prostrate and dying. Reproduced from J.H.E. Heitz, *Flugblätter des Sebastian Brant* (Strassburg: Heitz & Mündel, 1915). Courtesy of Special Collections, Michigan State University Libraries.

As poor families took out loans at high interest, slaughtered their precious cattle, and converged on Strasbourg in search of charity, dozens of angry young men plotted bloody revenge. A series of foiled rebellions marked a rapid escalation of discontent directed towards lords, monks and nuns. And from the Black Forest in the west to the Vosges mountains in the east, people were becoming convinced that God had abandoned His flock. New epidemic killers had badly shaken their confidence in divine protection (Figure 3). In early 1495, Strasbourg's leading citizen spoke of a 'bad pox'. Syphilis had arrived, carried to the city by mercenary pike men returning from the wars in Italy. The skin and weeping wounds of sufferers excited horror and revulsion. Most local authors interpreted the 'French Disease' as a divine visitation on vile sinners. They said the same about the resurgence of old killers like leprosy, smallpox and the plague. And in August 1517 hundreds attended a holy procession 'contra pestilentiam', beseeching the Virgin, St. Sebastian and St. Roche to withhold their fury. Far less deadly, but probably just as disturbing, was the appearance of the 'English sweat'. Arriving in Strasbourg for the first time in 1517, its victims sweated copiously, experiencing delirium and unquenchable thirst. Many sufferers died [4].

Anxiety and false fears gripped the region. People began to believe every dark rumour. In 1516, word spread of a woman from the plains beyond Strasbourg who claimed that she'd seen the ghost of her dead soldier-husband clutching his own severed head. Thousands imagined their dead relations to have escaped from Purgatory. What made talk of these visions all the more alarming is that many among the city's laity had lost faith in the clergy. Their priests were often half-educated lackeys, canons and monks kept concubines, while monasteries were eagerly selling their reserves of grain at high prices and buying up peasant debt. Many of the faithful, both rich and poor, felt alienated from the Church and doubtful of the clergy's ability to intercede effectively with God on their behalf [4,8].

The suffering of the poor intensified early in 1518. Records tell of hospitals and shelters utterly overwhelmed,

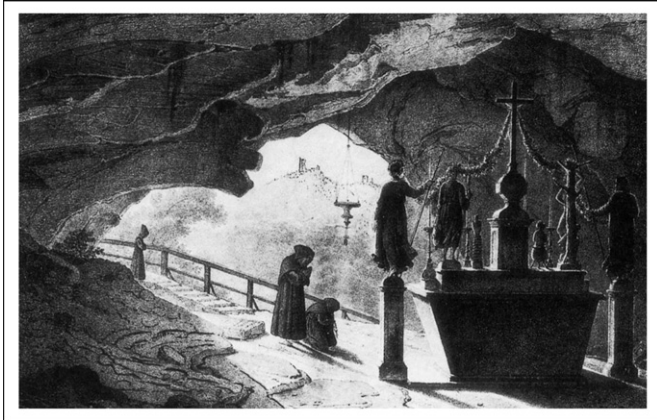
of an orphanage crowded with 300 beleaguered orphans, of a smallpox hospital heaving with fresh admissions, and a surge in cases of leprosy. This was not an ordinary level of hardship. These were terrible times even by the gruelling standards of the late medieval age. And they were conducive for some traumatised people to slip into the trance state. Indeed, there is strong evidence from the surviving chronicles that the poor of Strasbourg were disproportionately affected by the dancing plague [4]. This is a good indication that those who succumbed had been rendered susceptible by years of anguish and oppression.

### Environments of belief

There is plenty of evidence for the role of stress in the onset of spontaneous trance. Children in strict and emotionally barren schools, nuns in austere convents, and workers in harsh factory regimes have been among the most prone to experience altered states of consciousness. We also know that the dancing epidemic of 1374 was preceded by a dramatic upsurge in misery. It occurred just months after one of the worst floods in modern European history devastated the valleys of the Rhine and Mosel rivers. It is surely no coincidence that this earlier dancing plague spread in just those areas most severely affected by a catastrophic deluge [1].

But if widespread despair pushed hundreds of people into trance states in 1518, this does not explain why the people of Strasbourg danced in their delirium. It is at this point that insights from anthropology become invaluable. For the altered state of consciousness to which the Strasbourg dancers succumbed is not as wild as it might appear. In societies in which some people ritually lose full consciousness so as to make contact with a spirit world, the entranced typically act in ways prescribed by their cultures. Studies of these 'possession rituals', from Haiti and Madagascar to the Kalahari and the Arctic, teach us that the behaviour of the participants conforms to accepted beliefs and expectations. In the subconscious minds of those familiar with the state of trance and possession rituals, there is a culture-specific script which directs their feelings and actions. Just as importantly, exposure to others in the trance state makes observers themselves more susceptible to it. In supernaturalist cultures, people succumb to trance because they expect spirits to commandeer their souls [7].

There are fewer rules in the kinds of spontaneous trance experienced in Strasbourg in 1518 than in possession rituals, but cultural associations are still clearly mobilized. For instance, during the Middle Ages men and women who had crossed a threshold of emotional endurance often broke down in ways that conformed to the tropes of demonic possession. Their trances may have been flights from reality, but their behaviours once entranced were strongly stereotypical: writhing, foaming, convulsing, dancing, laughing, speaking in strange tongues and making obscene gestures and propositions. And when one person succumbed, others were often quick to follow. So if the dancing plague of 1518 was an analogous cultural phenomenon we should expect to find evidence of local beliefs in the possibility of a compulsion to dance. This brings us to the legend of St. Vitus.



**Figure 4.** Interior of the grotto of Saint Vitus above Saverne. Lithograph by Engelmann (1828). It was to this cave, just beneath the summit of a small mountain overlooking the Alsatian Plain, that the crazed dancers of 1518 were brought to pray before icons of St. Vitus. Towards the right of the altar can be seen the classic image of St. Vitus in a cauldron. Reproduced by kind permission of the Société d'Histoire et d'Archeologie de Saverne et Environs from Henri Heitz and Jean-Joseph Ring, *Promenades Historiques et Archéologiques Autour de Saverne* (Strasbourg, 2004).

Chronicles tell us that after the lone woman had started to dance in mid-July 1518, the onlookers quickly came to the conclusion she had been cursed by St. Vitus. Accordingly, she and later dozens more were taken to pray at 'St. Vitus-Saverne', a mountaintop shrine dedicated to this saint (Figure 4). St. Vitus' identity provides the key to understanding why the despair of the people of Strasbourg manifested itself in the form of wild dancing.

### Cursing saints

According to official Church legend, St. Vitus was a Sicilian martyr tortured and tormented in 303AD by order of the emperors Diocletian and Maximilian for refusing to abjure his Christian faith. They immersed him in a cauldron of boiling lead and tar and then threw him to a hungry lion, but he came out of the cauldron unharmed and the lion affectionately licked his hands. Shortly after, Vitus was finally allowed to ascend to Paradise, dying belatedly from the wounds his torturers did manage to inflict [1,4].

By the fifth century AD, there was already a shrine dedicated to the martyrdom of Vitus in Rome. In the fourteenth century he was made one of the 14 'holy helpers', prayed to by those suffering from epilepsy – the 'falling sickness' – and by women unable to conceive. In the late 1400s, a modest chapel dedicated to St. Vitus was constructed on a bluff of red sandstone in the Vosges mountains about 30 miles northwest of Strasbourg. But as a holy helper St. Vitus did not only cure. Late medieval Europeans reckoned that healing saints could *inflict* the same maladies they were meant to heal. And we have compelling evidence that the peoples of the Rhine and Mosel valleys believed that when the wrath of St. Vitus had been provoked, he sent down plagues of compulsive dancing.

The first indication we have of this belief comes from Switzerland in the fifteenth century, where two small outbreaks of involuntary dancing occurred in religious buildings. The timing is significant: both took place on or immediately before St. Vitus' Day (the 15th June). By 1509 the association between St. Vitus and epidemic dancing was well established. In this year, Johannes

Trithemius completed his chronicle of Sponheim Abbey, not far north of Strasbourg. He referred to the 1374 outbreak as 'S. Veitstanz', or St. Vitus' Dance. Further evidence comes from an altar panel painting of St. Vitus in a side chapel of the medieval cathedral of Cologne, dated to about 1500. On the painted plinth beneath Saint Vitus is a representation of three men unmistakably dancing, their legs energetically raised and arms joined for support. It told worshippers that St. Vitus came to the aid of those with the dancing plague. By implication it also reminded people of the divine source of the dancing madness [2,4].

Perhaps the most compelling evidence for the pervasiveness of these beliefs comes from the fact that by the late fifteenth century, phrases like 'God give you St. Vitus' and 'May St. Vitus come to you' were well-known curses in the Rhine region. These were not considered to be idle threats. A law from the late 1400s on the statute books of the town of Rottweil, southeast of Strasbourg, tells us that if someone 'cursed' another in the name of St. Vitus, 'the cursed person' was expected to develop 'a fever and St. Vitus' dance' [2,4,5].

A dread of this punitive affliction formed part of the collective consciousness of the peoples of the region. In times of acute hardship, with physical and mental distress leaving people more than usually suggestible, a fear of St Vitus could rapidly take hold. All it then took was for one or a few emotionally frail people, believing themselves to have been cursed by St. Vitus, to slip into a trance. Then they would unconsciously act out the part of those who had incurred his wrath: dancing wildly, uncontrollably for days on end.

Once we appreciate that the dancing plague arose from a pious fear of St. Vitus we can also see that the authorities in 1518 made matters a whole lot worse. It is hard to imagine anything better calculated to turn the dance into a full scale epidemic than making its victims perform their dances in the most public spaces in the city. The visibility of the dancers, especially those in the grain market and on the raised platform before the horse market, ensured that the minds of the city-folk dwelt dangerously on the curse. Each new victim increased the conviction that St. Vitus was stalking their city. And, immersed in the seductive rhythms of drums, horns and tambourines that drifted around halls and squares, more and more joined the crazed host.

There is strong evidence, then, that the people of Strasbourg danced in their misery due to an unquestioning belief in the wrath of God and His holy saints: the dancing plague was a pathological expression of desperation and pious fear. A variant of this explanation also fits the earlier outbreaks of dancing mania. In 1374, for instance, the afflicted were convinced that they had been cursed to dance by either the Devil or St. John. Rendered suggestible by fear and susceptible by hunger and despair, they too danced in accordance with their supernatural beliefs.

Further support for this theory comes from several eyewitness accounts, from the mid to late 1500s, of cults of entranced dancing in other areas along the western fringe of the Holy Roman Empire. Groups of distressed people would deliberately enter a trance and then dance, accompanied by musicians, towards shrines dedicated to either

St. Vitus or St. John. This was a truly remarkable cultural phenomenon. Dread of the dancing curse that had struck Strasbourg had been harnessed and controlled. A psychic epidemic had been turned into a possession cult [2,4].

### The mind incarnate

After 1518 there were no more large outbreaks of the dancing madness on European soil. The Reformation's attack on saint worship probably had something to do with its decline. And by the late seventeenth century, a rising tide of secularism rendered epidemics of dancing virtually unthinkable. But it is worth remembering these extraordinary psychic epidemics. After all, the dancing plagues shed rich light on the fervent supernaturalism of late medieval popular religion. To understand the fear of St. Vitus along the Rhine and Mosel Rivers is to come closer to penetrating the worldviews of the peoples who lived there. Just as importantly, the dancing epidemics highlight the remarkable fact that even when we lose control, we often do so in culturally prescribed ways. St. Vitus' Dance should be seen as a classic instance of the culture-bound syndrome, a manifestation of psychological distress shaped by prevailing beliefs. And, as the historian H.C. Erik Midelfort has pointed out, it is a striking reminder that mental illnesses

of the past 'are not petrified entities that can be plucked unchanged from their niches and placed under our modern microscopes' [1]. At the same time, psychic phenomena like the deadly dance of 1518 remind us of the ineffable strangeness of the human brain.

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