BELIEF, EXPLANATION AND RHE FORIC II THE GROP CIRCLE PHENOMENON OF SOUTHERN ENGLAND

CENTRE FOR NEWFOUNDLAND STUDIES

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BRUCE LIONEL MASON, M.A. (hons).







BELIEF, EXPLANATION AND RHETORIC IN THE CROP CIRCLE PHENOMENON OF SOUTHERN ENGLAND.

BY

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Abstract

This thesis presents an analysis of various beliefs engendered by the crop circle phenomenon of southern England. It concentrates on the various exnanctions that have been offered for the origin of the circles.

Crop circles are areas of cereal crop that have been flattened into a symmetrical, geometric, usually circular shape that do not appear to be explicable in terms of current scientific knowledge. The combination of the anomalous nature of the shapes, their objective reality, and the often stun-

ning beauty of the formations has led to an intensive debate, carried on at

all levels of interest, into what causes these shapes, and why.

The nature of the phenomenon has foregrounded issues in folk belief, that are often obscured in related fields (eg. UFOs, ghost beliefs, fairy fore), pertaining to the methods by which individuals construct systems of belief and explanations from the evidence presented to them. This thesis proposes to utilise this unique opportunity to demonstrate the folkloric nature of explanation. As such it draws on the concepts of traditions of belief and disbelief, paradigmatic revolutions in systems of thought, and the concept of rationally constructed systems of folk belief to demonstrate the methods by which the various explanations for crop circles have been generated, maintained and disseminated.

Acknowledgements

This thesis is the sum of many thoughts and many conversations and I feel more like the midwife than either of the parents. As you read this, the help that I have received and the intellectual debts I owe should become apparent; the mistakes, misperceptions, misapprehensions are, however, mine alone

First and foremost. I owe thanks to my supervisor, Dr. Diane Goldstein, who taught me the necessity of taking other peoples' heliefs seriously. I wish also to thank Dr. Gillian Bennett and Dr. Paul Smith for comments and photocopies. I owe an inestimable debt to my fellow travellers and housemates, here on "The Rock", for large helpings of advice, understanding, Jigg's dianers, and their amazing ability to sit through my latest ramblings about crop circles and paradigms without looking bored. Special thanks are due to Anita Best, Eileen Condon, Marie-Annick Desplanques, Mark Ferguson, Melissa Ladenheim, Jamie Moreira, and Suzanne Norman for their proofreading heroism.

I can truthfully say that I never received a had word from any of the circles researchers whose work is so crucial to this thesis; their patience and enthusiasm astounds me still. I hope this document goes some way to repay ing the efforts they have made.

This thesis was produced during my tenure as the Memorial-Edinburgh fellow for 1989-1991, and I wish to thank the School of Graduate Studies and the office of the Dean of Arts here at MUN for their generous financial support, and Dr. Ged Martin at The Centre for Canadian Studies in Edinburgh for having faith in me in the first place. I wish also to thank the Harlow Campus Trustees for a grant towards taking coursework in the UK in the summer of 1990. I am grateful also for a contribution towards my fieldwork expenses from the Folklore Department at MUN.

I would also like to thank the readers of this thesis for their careful and insightful commentaries. A special thank you goes to Dr. Alan Jeffrey for his help with IsTgXquestions and the loan of his computer.

More than anything else though, this would never even have been started without the love and support of my family. To them and to Mrs. Julie Mason, Mum, in particular, this work is dedicated. Corny, but true.

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Homo Sapiens

Were I (who to my cost already am One of those strange, prodigious creatures, man) A spirit free to choose, for my own share, What case of flesh and blood I pleased to wear, I'd be a dog, a monkey, or a bear, Or anything but that vain animal Who is so proud of being rational. The senses are too gross, and he'll contrive A sixth, to contradict the other five. And before certain instinct, will prefer Reason, which fifty times for one does err; Reason, an ignis fatuus in the mind, Which, leaving light of nature, sense, behind, Pathless and dangerous wandering ways it takes Through error's fenny bogs and thorny brakes: Whilst the misguided follower climbs with pain Mountains of whimseys, heaped in his own brain; Stumbling from thought to thought, falls headlong down Into doubt's boundless sea, where, like to drown, Books bear him up a while, and make him try To swim with bladders of philosophy; In hopes still to o'ertake the escaping light. The vapour dances in his dazzling sight Till, spent, it leaves him to eternal night. Then old age and experience, hand in hand, Lead him to death and make him understand, After a search so painful and so long, That all his life he has been in the wrong. Huddled in dirt the reasoning engine lies, Who was so proud, so witty, and so wise.

John Wilmot, Earl of Rochester. 1647-1680.

Introduction

Every summer for the last few years, and possibly for a long, long time before, mysterious markings have been appearing in farmers' fields in the South
of England. Usually unseen, generally in the hours of darkness, some agency
leaves areas of cereal crops flattened in spirals, forming shapes that approximate circles and sometimes more complex figures. Paradoxically the crop is
flattened with great force yet is usually undamaged, continues to ripen and
sometimes even to regrow. In the early morning sun or in the burnished heat
of a late August afternoon, the beauty of these shapes can be breathtaking, filling those who journey to see them with awe and fascination; causing
even those who only see them in newspaper photographs to occasionally stop
and wonder about the manner of thing that can cause such seemingly perfect
shapes, such suggestively meaningful forms, and why? Why only in "haunted
Wessex", home to ancient marvels such as Stonehenge and Avebury, an area
redolent with romance and magic and now home to the modern military?
Why now? Why only in crop fields? As John Michell asks, "what mean

these marks?"

This thesis is not about crop circles, nor, perhaps unfortunately, does it set out to answer any of these questions. Instead it sets out to examine the answers that others have come up with. There are plenty of explanations for crop circles within these pages, from the purely frivolous to the feroviously scientific. None of these are my explanations, though naturally I find some more convincing than others, and that is as it should be, for what I am setting out to do is to look at how people have come to explain the circles.

The word explanation will crop up frequently throughout this thesis primarily because it is built around certain explanations that have been proposed for the origin of the crop circles. The explanations are used to provide a structure for the document and to give it a theoretical backbone. It would have been possible to collect random dites about crop circles and to present them here. Such a collection would be entertaining, might even prove useful to some future scholar, but would of itself be analytically worthless. Instead I believe it is possible to see various crop circle beliefs as being motivated by various explanations for the marks, and it is this principle that guided my research.

There have been many, many explanations provided for the hows and whys of the crop circle phenomenon. Most of them are idiosyncratic and often explicitly humourous. My interest is in the supraindividual explanations, those that seem to be held by a wide variety of individuals. The precise expression of these explanations, their complexity, relevance, and attention to detail vary. This thesis takes them as a unified ideological field and deals with the variations as a product of individual beliefs, as being a response to the quality and quantity of information available, and as a function of just how important these explanations are to the individuals who hold them.

It can be seen that this is not a sociological study of crop circle beliefs. for such a study would, by definition, focus on the social institutions and networks that carried the beliefs, nor is it, say, a social-psychological study, analysing beliefs in terms of an individual's social status or psychological make-up. Such studies would be useful and will, hopefully, be undertaken. Very simply this thesis takes the view that the various explanations have their roots in tradition - that they represent an application of traditional ways and means of coming to an understanding of the world. Consequently this analysis is pitched at a macro level, observing the explanations as they are expressed, transmitted, received and utilised by a whole spectrum of individuals. Again, there are many other approaches that could be taken in accordance with folkloristic methodology - an analysis perhaps of small self-defined groups of believers (or disbelievers), or a focus on the narrative structures of explanations, either as elicited by a fieldworker or as occurring in group discussions. All of these have their place. This thesis is based around the elicitation of crop circle beliefs, a typology of these beliefs, and some thoughts on how they are maintained and justified. It is really a rather

basic enterprise; it surprises me that it has taken over three hundred pages to expound it.

Necessarily I am concentrating on those explanations that have been popularly successful. The three main explanations can be summarised as:

Cereological. The belief that the circles are being deliberately formed by a supranormal, possibly extraterrestrial, intelligence.

Meteorological. The belief that the circles are the result of natural, atmospheric forces.

Hoax. The belief that the circles are the result of human hoaxers deliberately making the formations.

There are other explanations that receive a degree of popular support and these are dealt with in less detail. The three above are elicited from the works of circle researchers as well as the statements of ordinary people. As someone who was interested in crop circles before I even thought about becoming a folklorist and who has been living in the West Country for some thirteen years, I can say that it is also a partition that feels comfortable to me.

The fieldwork for this thesis was undertaken during the summer of 1990 and the following winter, with an eight week break to complete mandatory coursework. Unfortunately that break occurred during July and August, and although I was in the UK during the time, it severely limited the amount of fieldwork that could be done at the climax of the season. It was a break that

could not be avoided and, in fact, provided the only way in which I could conduct research on this subject at all. The basic premise of the fieldwork was to interview as wide a range of people as possible about crop circles. Although this included tape-recorded interviews with circles researchers the bulk of the material came from surreptitiously recorded talk with "ordinary" people. Some people did refuse to let me use their thoughts but most, if somewhat surprised when asked if I could write down and repeat what they had just said, were cooperative. Naturally this thesis only includes those examples that I gained permission to use.

It should be noted that crop circles are a seasonal phenomenon and interest waxes and wanes with the annual round. As I write this a new season is underway. After the staggering events of 1990 many are waiting breathlessly for the new summer. By the time it is finished this thesis will be based on views that are already a year old, and who knows what the new year will bring.

Of course the question does arise, why study crop circles? The simple answer is that they are there, they are as objectively real as the paper this is written on. As Ralph Noves say:

The circles are there, tangibly, visibly, measurably. They are there for all to see. There can be no doubt about their physical, their palpable existence. We don't have to believe in them, we merely have to observe them — and to puzzle our wits about them. (Introduction, 29. Italias in original.)

Unlike so many issues in supernatural folk belief, all those tiresome argu-

ments purporting to show that anyone who sees unusual phenomena is a fool, drunkard, congenital liar or an artist can be done away with. The physical tangibility of crop circles brooks no gainsaying and foregrounds the issue of explanation in a way unique in contemporary folk belief. Furthermore, crop circles may be significantly older than Adam, but the interest in them is not. The perceived novelty of the phenomenon lets one in on traditions in the making, a rare opportunity indeed for a folklorist more accustomed to the painstaking, and often thankless, reconstructions of traditions long since ossified.

Some Terminology

At this point it is useful to explain some of the terms that will be used throughout this thesis. Firstly a dichotomy is made between 'genuine' and 'hoax' circles. This is not to prejudge any explanation for the crop circles, merely to point out that there are a number of known hoaxes that display different characteristics to genuine crop circles. These are 'hoax' circles, by definition the rest are 'genuine'. Of course, who or what created the genuine crop circles is a matter for debate. Secondly there is an attempt to differentiate between crop circles and the agency — the "circles effect" that is immediately responsible for their creation. This "circles effect" is a term borrowed from one particular circles researcher, Terence Meaden, and is used in a broader sense than he intended. Whether this "circles effect"

is directed by any type of intelligence is a moot point. Technically, most explanations are directed towards trying to understand this circles effect the crop circles are evidence for and of it. When I talk about "explaining crop circles" it is merely shorthand for some more cumbrous circumlocution.

Guide to the Chapters

Chapter one provides an overview of the phenomenon. It first gives a necessarily detailed analysis of the internal structure of crop circle formations as well as something of a typology of the different formations. Next I give a social history of the phenomenon which traces the development of interest in the crop circles and the explosion of information about them. Much of this focuses on the activities of a dedicated band of circles researchers. The chapter concludes with an account of the researchers' investigations into the prehistory of the phenomenon, and their use of folklore materials in the debate about the historical basis for crop circles.

Chapter two provides the basic theoretical background to the thesis. To do this I first sketch something of the development of scholarship in supernatural folk belief studies, concentrating particularly on the relationship between the scholars and their materials. From this I conclude that the scholarship has been marked by scholars' attitudes of disbelief about supernatural phenomena. This is used to provide the context against which contemporary folk belief scholars have reacted in attempting to remove the notion of "objective truth" as a defining characteristic of whether something falls into the subject of folk belief. It is this standpoint that allows me to develop the concept of "explanation" as an organising principle in a system of belief systems in general. The chapter concludes with some remarks about the basic assumptions behind my fieldwork methodology.

Chapter three commences with a more detailed look at the type of data I collected. The main body of the chapter is, however, based around the presentation of various beliefs about crop circles. The data is organised into three main schools of thought, "explanations", that provide the immediate context for the data. The chapter concludes by presenting some beliefs that appear to fall without these explanations and with some preliminary thoughts on synthesis.

Chapter four examines the discourse engendered by the competition between the crop circle explanations. It examines the various ways by which the proponents of particular explanations validate and propagate their theories, the rhetorical strategies they use to do so and those they use to invalidate the explanations of others. The latter aspect takes a slightly different view of David Hufford's concept of "traditions of disbrileif" booking at it as a rhetorical tool. This chapter also provides a comparative analysis of crop circle explanations with some from other belief traditions, such as fairy rings. This dual focus is intended to provide something of a synchronic and diachronic overview of crop circle explanations.

Chapter five attempts to provide a theoretical analysis of the preceeding data. It assumes that the explanations, whether 'folk' or not, are coherent, rational systems of thought. The crux of the argument is an application of Thomas Kuhn's study of revolutionary change in scientific thought to the various crop circles explanations. It is argued that this helps to explain some issues that would otherwise seem anomalous and provides a useful description of the relationships between innovation and tradition. Some thoughts are also presented on the generic nature of explanations as expressive forms.

Appendices to this thesis deal with related but tangential issues. The first presents the text of the "Mowing devil" chapbook, commonly supposed to be the earliest known reference to a crop circle formation. The second is a brief overview of the Canadian and North American circle formations, including the mysterious "burn circles", which may or may not be part of the same phenomenon. The final one is a list of useful sources for crop circle information.

The thesis is finished with two bibliographies. The first is a bibliography
of crop circle publications and is intended as a resource for further study.

The second bibliography is a standard list of references and works consulted.

A note on citations

This thesis uses the basic MLA parenthetical citation style as recommended in the MLA Handbook. This system is based on the concept of keeping parenthetical information to the bareat minimum and uses a mixture of author, title and page number to identify sources. Unfortunately it is a somewhat archaic system and occasionally breaks down in this thesis due to the small number of extremely prolific authors on crop circles who all tend, unsurprisingly, to start their titles with a 'c'. Therefore I have at times used footnotes, where technically there should be parenthetical citations, to keep the running text as uncluttered as possible.

¹Joseph Gibaldi and Walter S. Achtert, The MLA Handbook for Writers of Research Papers 3rd edition (NY: MLA, 1988).

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Glossary of Terms and Abbreviations

- BUFORA. "British UFO Research Association." The major UFO research organisation in the UK.
- CERES. "The Circles Effect Research Unit." Database run by Terence Meaden that promotes a meteorological explanation.
- CCCS. "The Centre for Crop Circle Studies." An organisation created to act as a neutral clearing-house for crop circle research in practice its members lean towards a cereological explanation for the phenomenon.
- CPR. "Circles Phenomenon Research." A database and organisation run by Colin Andrews that favours a cereological explanation.
- Cereology. Name used in this thesis to describe the study of crop circles based on the premise that there is a non-human intelligence directing the circles effect. Hence cereological, cereologist.

- The Circles Effect. Term used to describe the effect required to produce a crop circle. Generally only used by the meteorologists in which case it is held to be synonymous with plasma vortex. Used in this thesis in a more general sense to refer to any agency, whether intelligently directed or not, that is held to be responsible for crop circle formation.
- Circles Effect Traces. Synonymous with crop circles. A term often used by proponents of the meteorological explanation.
- Crop Circles. Areas of cereal crop flattened into generally circular shapes.
 Such shapes may be found in other media such as snow or grass. Occasionally known as circles effect traces. More complex formations consisting of interconnected circles and containing other shapes such as rectangles, ares, claws, and keys are usually referred to as pictograms.
- Dumb-bells. Circle formations consisting of two circles joined by a pathway.
 Often these feature various subsidiary markings such as rings, keys, claws, boxes. Dumb-bells form part of a more general set of circle formations known as pictograms.
- ETH. The "Extraterrestrial Hypothesis." The 'heory that UFOs are a type of alien spacecraft.
- Meteorology. In this thesis used to denote circles research based on the premise that crop circles are caused by a type of natural, atmospheric phenomenon. Hence meteorological, meteorologist.

- MUFON. "Mutual UFO Network." The major North American UFO research organisation.
- NAICCR. "North American Institute for Crop Circle Research." The maior database in the U.S. and Canada pertaining to crop circles.
- Pictograms. Very complex crop circle formations, usually consisting of two in-line dumb-bells with various subsidiary markings such as rings, keys, claws, boxes.
- Plasma vortex. The name given to a putative natural atmospheric phenomenon that is thought, by meteorologists, to cause crop circles.
- TORRO. "The Tornado and Storm Research Organisation." Initiated by Terence Meaden, a companion organisation to CERES.
- UGM. "Unidentified Ground Marking." Anomalous marking on the ground.
 The term is used by some to subsume crop circles within a more general phenomenon.
- UFO. "Unidentified Flying Object." Often used synonymously with the term "Flying Saucer".

Chapter 1

The Crop Circle Phenomenon

Introduction

On July 11th 1983, the *Daily Express* — a national, daily newspaper in the UK — ran a front page headline that read:

E.T. Phone The Express!1

Beneath the headline there was an aerial photograph of a mysterious circular mark in a cereal field. The corresponding text, written in a humorous manner, asked "E.T." — an imaginary extraterrestrial being made famous by Stephen Speilberg's film of the same name² — to contact the newspaper's offices.

¹Qtd. in Meaden, "Circles From the Sky" 21-22.

²E.T.: The Extra-Terrestrial. Dir. Stephen Speilberg. With Dee Wallace, Henry Thomas. Universal, 1983.

This event makes a useful starting point in an attempt to describe the mysterious phenomena that have been occurring in standing cereal crops, both in Britain and around the world, for definitely a decade, and possibly a lot longer. The newspaper article marked the turning point at which a mystifying but little known puzzle started to become a national obsession. It presages many of the themes that are to become of increasing importance in the unfolding of the mystery. At this point, a physical phenomenon known about by only a few individuals began to evolve into a mass-media phenomenon of such an extent that in the Summer of 1990 I was, despite intensive fieldwork, only able to find one person who had never heard about "crop circles."

The passage in the Daily Express demonstrated many features in the presentation of the mystery that persist today. I will briefly outline them here:

- The description of the marks in the field that stresses their geometric precision;
- · The use of aerial photography to convey the nature of the marks;
- The use of popular culture referents in the discussion of the phenomenon:
- The imbedding of an explanation in the interpretation of the phenomenon, in this case it is in the nature of a parody.

All of these aspects indicate that there are at least two facets of the crop circle phenomenon: there is the issue of the marks in cereal fields and there is the issue of the debate about these marks.

The information about crop circles has evolved at a tremendous rate as more and more people have become involved with it. Thus there has been a definite increase in the amount and quality of information about the phenomenon. What is uncertain is whether the phenomenon itself is evolving: whether or not the shapes are becoming more complex and sophisticated with time. Certainly the interplay between the perception and the objective reality of the events is complex and poses many problems in any attempt to present an unbiased picture of the various phenomena. For this reason I will present a historical overview of the phenomenon on a chronological basis, starting in 1980: the generally accepted date for the origin of the 'modern' crop circle phenomenon. By using this method, I can more accurately chart the evolution of interest in, and beliefs about, the subject. The secondary issue is the actual structure of the crop circles themselves. This I will present first in order to contextualize discussion that follows.

1.1 The Structure of Crop Circles

Figure 1.1 below shows a simple crop circle. From this photograph several salient points can be noted. First, the crop is not cut, nor is it crushed: rather it is bent over at the base. Furthermore the crop is laid on the ground in a complicated pattern. Figure 1.2 gives a closer view of the lay of the crop in a more complex, "dumb-hell" formation. From this it can be seen that there is a pattern which spirals out from a centre. In this case it is an anti-clockwise spiral.

Second, there is a sharp edge to the area of flattened crop. This can be clearly seen in figure 1.3. Although there are some partially bent stems at the very edge, the demarcation is precise. Also it should be noted that there is no damage to the surrounding crop.

In the most minimal case a crop circle can be defined as an area of flattened but otherwise undamaged crop that approximates a geometrically regular, usually circular, shape in which the flattened crop is laid in a complex but ordered manner. The crop can theoretically be anything that is capable of being impressed by the circle-forming process. Meaden, writing in The Circles Effect details 14 types of crop:

Many types of crop are represented: wheat, barley, oats, rye, maize, rape, mustard, sugarbeet, runner beans, soy beans, tick beans, spinach, tobacco and rice. To these we may add grass, reeds, swamp-vegetation, sand, dirt and snow. (15)

It should, however, be noted that the term "crop circle" is something of a misnomer. It is in fact very rare for crop circles to be completely circular, generally they are more elliptical or oval. One estimate has, for circular



 $\label{eq:Figure 1.1: A simple crop circle} Figure 1.1: A simple crop circle The photograph is © G. T. Meaden.$



Figure 1.2: Detail showing spiral crop lay in a circle
This example is from one of the earlier "pictograms" (named "Gaia") found
in the summer of 1990 at Telegraph Hill near Petersfield in Hampshire.

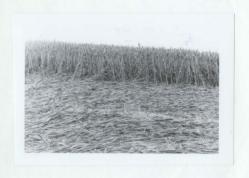


Figure 1.3: Detail showing the sharp edge of a circle

patterns, an average longest to shortest diameter ratio of 0.9.3

The above gives a bare idea of one possible type of crop circle. In reality there are many more. In 1989 Delgado and Andrews published a template of 16 shapes that had occurred before the summer of 1989 (Circular Endeace 118-119). By the end of that summer Ralph Noyes was able to expand the list to some 24 types. In addition to this parameter of variation there is also considerable scope for differences in the lay patterns of the formations. Delgado and Andrews were able to isolate 13 distinct types of lays—from a simple spiral, to a radial splay, to an "S" shaped pattern—but admitted that there were many circles that had lays (Circular Endeace 123). Further complication is provided by formations popularly known as "pictograms": formations in which one or more circles are joined together by connecting lines. These pictograms can be incredibly complex as figure 1.4 shows. During 1990 there were at least 13 pictograms as well as a whole host of other types (Delgado and Andrews, Latest Evidence 72 75). Quite simply the range of shapes is staggering. There has even been a triangle found.

³Fuller and Randles, Controversy of the Circles 43. See Green for a particularly striking photograph of an ovoid crop circle ("Rings" 140).

[&]quot;Noyes, introduction 21. The most recent list of types was published as an appendix to Chorost's "Thesis". This gave 77 types but did not necessarily distinguish genuine circles from hoazes.

See for example, Meaden, "Beckhampton 'Scroll-Type' Circles"; Delgado and Andrews, Latest Evidence 52-57.



Figure 1.4: Pictogram in Wiltshire
The photograph shows a pictogram found at Stratton St. Bernard in 1990.
© G. T. Meaden.

1.1.1 Distribution of circles

The large majority of crop circles have been found in Southern England, leading to claims of a "Wessex Corridor" or "Wessex Triangle" of circle sites. A Regardless of the precise definition of the area affected, it is true to say that the greatest density of crop circle occurrences are to be found in southern and south-west England. This has had tremendous implications for the popular discourse about the crop circles, as that part of the UK is filled with many prehistoric artifacts with a circular theme, such as Stonehenge. Also, this particular area of Britain has provided a large number of UFO sightings, with one particular place, Warminster, being dubbed "The UFO capital of Britain" in the 1960s.

Circle formations have been found throughout the world. Meaden lists several countries from which he has data:

They are known from at least twelve countries in most continents, from the U.S.A. and Canada to South America, and from Europe to the U.S.R., Japan, Australia, Tasmania and New Zealaud. In Europe circles have been reported from France, Italy, Switzerland, Austria and Scandanavia. (Criefes Effect 15)

It is, however, only in the UK that a significant popular and media interest exists. Furthermore, there are particular areas within this area that are par-

⁶See Noyes "Corridors and W's" for a humorous account of attempts to assign a geographical topography to circle sites. For maps stressing the Wessex connection see Noyes, Crop Circle Enigma 187; Delgado and Andrews, Latest Evidence 76; for maps de-emphasizing this see Meaden, Circles Effect 106-107; Randles and Fuller 127.

⁷See Shuttlewood for an account of the UFO sightings around Warminster in the 1960s.
⁸Recently there has been an upsurge of media interest in Canada and the U.S. Also,

ticularly prone to the occurrence of circle formations, in some cases specific fields have had several formations in them over a period of time. The most famous example of this is the "Devil's Punchbowl" at Cheesefoot Head near Petersfield in Hampshire. This field has had at least 9 different formations found in it since 1981, as well as one proven hoax, and some letters reading "WEARENOTALONE" pressed into the crop in 1986.

Fields such as this, known as "repeaters", have played a large part in enouraging interest in the phenomenon, for they give researchers a chance to predict the locations in which formations may occur. This has led' to several "crop watches", with varying degrees of media interest, in which researchers set up camp for a period of days in order to monitor a known repeater site and hopefully record the advent of a crop circle. Amongst researchers and associates these vigils, whether scientifically based or not, seem to fulfill a similar role to UFO watches, the same sense of shared excitement, and dedication permeating both events.

In summary it would seem that although circle formations can, and do, form throughout the world, the majority of reported cases are in the UK. Of those cases in the UK, the majority are found in Southern England. Of those found in this area, there are a small percentage which occur in specific, repeater fields and a larger percentage that tend to occur in certain geographical areas.

with the German translation of Circular Evidence one might expect an increase of interest in that country.

1.1.2 Detailed list of circle features

Writing in Circular Evidence, Delgado and Andrews address the problem of totally defining the force which is responsible for creating the circles by attempting to list the necessary and sufficient features required to produce the effects that are seen in crop circles.

... a silent, short-duration, strong, contra-rotative, damage-free flattening, swifting, whort and vein-forming, swatning, stembending, horizontal-growth inducing, non-growth interfering, straightpath forming, plant-extracting, total-darkness operating, gapseeking, superimposing, circle-group forming, weather condition free, extraneous marks free, topographically conditionless, worldwide operative force. (158)

This definition, whilst not accepted by all in its entirety, does provide a useful index to the various features found in circle formations. It can be broken down into several constituent parts: the immediate effect of the force on the crop (as seen in the initial crop formation), the after-effects of the damage, the associated circle phenomena, and the appearance of the force as it constructs a circle. Although it is necessary to give a description of the various aspects to the formations this has already been competently done many times before, so I can do little here apart from try to synthesize the various important factors.⁹

⁹For other descriptions see: Delgado and Andrews, Circular Evidence 117, 145; Meaden, Circles Effect, 11-24; Randles and Fuller, Mustern Solved 40-54.

Edges

As already noted there is often a precise orige between the unaffected crop and the flattened area. The edge itself is susceptible to a phenomenon known as "gap-seeking." ¹⁰ This occurs when the arc that the edge is describing meets an area devoid of standing crop, such as occurs on tractor lines. In such cases the circular path of the edge may be temporarily distorted before it resumes its initial course.

Not all edges are precisely cut. There are various types of imperfection other than gap-seeking as mentioned above, the most common of which occurs when the edge appears to be spiked, as can be seen in Meaden's The Circles Effect figure 37 in which the imprecise nature of the edge is made clear (71). The photograph in figure 1.5 also shows a ragsed edge.

Crop lay within circles

There are innumerable patterns in which the crop in a flattened area may be laid. Many detailed phenomena are associated with this.

The crop can be pressed down with varying degrees of force. In some circles the crop appears to have merely been "brushed" by the force and is not flattened at all, just bent at the top knuckle of the plant. 11 At other times the area may be totally flattened. The difference can be seen by examining

¹⁰The term is Pat Delgado's. See Delgado and Andrews, Circular Evidence 156-158.



Figure 1.5: A dowser at work in a circle Note the serrated look of the edge of the circle.



Figure 1.6: Detail of crop lay in the pictogram at Telegraph Hill

figure 1.6 in which the crop is laid totally flat and figure 1.7 in which the crop looks scruffy. There may be some degree of correlation between the type of lay and the extent of the pressure exerted upon the crop. For example "starburst" patterns — patterns where the lay is radially directed towards the circumference — are generally pressed very hard into the ground.

The centre of the lay pattern is often not coincident with the geometrical centre of the formation. Another noted phenomenon is double-centering:



Figure 1.7: Detail of scruffily laid crop

cases in which the lay has two centres.12

There are also fine details in the method of the lay. Most "genuine" crop circles display "banding" and "layering" effects to some degree. Banding occurs when the crop is laid down in bundles, often looking as though it has been combed by some giant, 7-toothed comb. This can be seen in figure 1.2.13 Leayering is the term given to the phenomenon in which the crop may be layered over itself in different directions within the pattern.

Associated circle phenomena

Finally, the crop inside the circle is not always totally affected. Sometimes arcs of standing cereal crop are left. Also there are cases in which a pyramidical formation of standing crop is left untouched in the centre of the main circle. ¹⁴ The reverse can also occur with the central part completely devoid of the crop: leaving nothing but bare earth.

Other features of circle formations

There are many miscellaneous features that have become associated with crop circle formations. For example some formations that consist of a central circle with satellite circles have a very fine ring connecting the satellites that

¹²Andrews, J. Meteorology UK (1987): 48-51; Meaden, J. Meteorology UK (1987):

¹³A clearer photograph, showing both banding and layering details, can be found in Randles and Fuller. Musters Solved plate 4.

¹¹For a plan and picture of standing arcs see Meaden, Circular Evidence 70. For a description of untouched, central formations see Meaden and Elsom 15-16.



Figure 1.8: Seven satellite formation at Bickington

is only discoverable by close investigation. The Bickington case is one such example. In my survey I missed the existence of a ring connecting the seven satellites and it was not until an aerial shot became available that the ring was discovered. For example, compare the photograph shown in figure 1.8 with the aerial shot in Crop Circle Enigma in which a thin outer ring can just be seen; the other tracks were made by visitors (Noyes 115).

Another oddity of the formations is their propensity to align themselves with tractor lines. Tractor lines are the ruts made in fields along which tractors are driven during crop-spraying. To minimize crop damage the farmers always drive along the same lines. This has the effect of leaving sets of regularly-spaced parallel lines along which no crops grow. These lines, where they coincide with the edge of a formation, usually lead to gap-seeking phenomena as described earlier. Also many formations often orientate themselves with these lines in some manner. For example many of the complex pictograms use the tractor lines as the long axis in the formation. (See for example figures 1.4, 1.11, 1.12.) Although many formations do not use tracture lines at all, many more do use them than should be predicted by chance along. 18

Possibly the most unusual feature of the formations lies in their relation to dowsing. Dowsing is a well-known but unexplained phenomenon that is usually associated with "water witching": the art of discovering underground water sources. Its adherents, however, claim many uses for the technique, and dowsers say that they are able to detect particular patterns of "energy" that can be found only in genuine crop circles. That is to say that it is possible for a dowser to map out the topographic form of a circle by plotting the reaction of his or her dowsing instrument as the practitioner walks about the circle. These surveys tend to produce certain patterns that occur time and time again within genuine circles but not within hoaxes. This has led to

¹²See Meaden's comments on this phenomenon in "Beckhampton 'Scroll-type Circles'".
¹⁶For the relation between dowsing and crop circles see Richard Andrews; Wingfield, "Ever Increasing Circles" 26-29. For a briefer synopsis see Randles and Fuller, Mystery Solved 46.

dowsing being used as a veracity test on problematic circles. The technique is in use by all of the dedicated researchers including Terence Meaden, the leading advocate of the meteorological explanation and former professor of Physics at Dalhousie University in Nova Scotia, who referred to it, rather coyly, as an "instrumental security-check" ("Circles from the Sky" 17).

I too have seen this phenomenon at work in the very first circle formation I visited — the seven satellite formation at Bickington. At the time there was doubt as to its veracity, for it could be seen from a nearby public house and there is an agricultural college less than two miles away. I knew nothing of the dowsing test and happened to meet a dowser who had never been to a circle before but who had heard that it was possible to get a reading in a circle. As neither of us knew what to look for he did various tests and got certain readings which I put in a report to Terence Meaden as an interesting point. I was quite surprised to discover that dowsing was an accepted test and that, furthermore, the results seemed to be as predicted for a genuine circle. (Figure 1.5 on page 14 shows the dowser at work, taking readings from the circumference of the circle.)

Although there are varying interpretations of the meaning of the downing test all of the various circles researchers do take the test as valid and useful. So far, circles that fail to dowse properly have all been unmasked as hoazes and there is yet to be an acknowledged hoaz that has passed the downing test.¹⁷ Furthermore there are claims that even several years after the field containing a circle has been harvested it is still possible to elicit the dowsed pattern at the precise location of the pattern.¹⁸

Place and time of occurrence

As already stated, the wast majority of circle cases have occurred in the Wessex area. Although there is no generally accepted figure for the percentage of these that are hoaxes, it does seem that a large number found outside of the Wessex area are not genuine circles. This fact is interpreted many ways. There does also seem to be an association of circle formations with hills. Randles and Fuller quote figures to the effect that 89% of crop circles appear within 2km of steep hill slopes and that the correlation between the distance to hill slope and circle frequency is +0.77 which represents a high degree of certainty. Although many researchers do not accept these findings all agree that circles tend to happen around tumuli—ancient hill-forts—and other sites of archaeological interest. There is also widespread agreement on the

¹⁷The issue of hoazing and its extent is a contentious one. For now it is enough to say that there are at least two types of circle formations: those known to have been created by humans and the rest. Of course it could be the case that there are hot's 'professional' and 'amateur' hoazers. Regardless, it is still a valuable distinction to make. If there are professional hoazers then their method of construction is such as to leave these downships.

¹⁸Randles and Fuller, Mystery Solved 46; Wingfield, "Ever Increasing Circles" 27-28.
¹⁹Fuller, Rev. of David Fisher 14. In a more recent communication Fuller quotes a figure of 0.82 for the correlation based on the data in Andrew Hewitt's thesis. See also, Fuller, "The Hill Slone Effect."

³⁰See for example Delgado and Andrews, Circular Evidence 19; Wingfield, "Ever Increasing Circles" 32.

fact that circles do tend to cluster in certain locations (there are three main sites in the south of England), the disagreement is in the reason for this.

Finally it seems that most formations occur at night. Again there are many reasons proposed for this fact but there is no disagreement with the general proposition.

Other noted phenomena

There have been many other phenomena noted in association with crop circles but their status is problematical. Probably the most famous of these is the claim that the molecular structure of the affected crop is changed by the event. The evidence for this comes mostly from Delgado and Andrews who show microscope slides that appear to depict changes in the internal structure of the affected wheat from a circle in Willshire (Latest Evidence '22). So far there does not seem to have been any successful repetition of the test nor is there any agreement as to the meaning of the result.²¹

There is also disagreement about the regrowth of the crop once it has been affected. That it is still alive and healthy, if somewhat horizontal, is beyond doubt but there is debate as to what happens next. Delgado and Andrews argue that the crop continues to grow sideways in its new position (Circular Evidence 31). Meaden points out that after a certain stage, it is no longer possible for a cereal crop to bend and that therefore any growth

²¹See for example John Haddington's letter to The Cerealogist 3 (1991): 23.

would have to occur horizontally. Conversely if the cereal crop was damaged before reaching this stage of growth it would be possible for it to bend at a node and grow vertically.²² This process can be seen in figure 1.9 which is a photograph of the pictogram at Chilcomb farm taken some 4 weeks after the initial damage; it can be seen that some of the wheat is beginning to grow upright again, confusing the shape of the area.

There have also been accounts of unusual events associated with crop circles. Delgado and Andrews report several occurrences of electrical equipment failing inside circles (Circular Evidence 172-173). There are also accounts of animals refusing to enter circles or acting strangely within them or during the formation of a circle.²³ The final puzzle is what appears to be additions to already existing circles. Such cases appear to be rare and circle researchers are often reductant to discuss them. The addition of an extra ring to the Bishop's Canning formation in 1990 caused an argument at the First Inter-

But of course if the stems of a crop have fully matured (is lignified) they can not possibly repond [geotroically], because when the stem has set there can not be any further geotropic response anyway. The nodes cannot move, Indeed it is only while the main shoot is immature that any possibility for notab bending exists. This limits us to no later than stage 39 on the Zadocks-Chang Konnak decimal scale of cereal-growth. For southern England in spring-summer 1989 growth-stage 39 corresponded approximately to winter-sown creat crops struck down by vortices in mid-May or easiler.

²²In "Circles From the Sky" Meaden states:

²³ For example, Delgado and Andrews, Circular Evidence 65, 81; Meaden, The Circles Effect 29, 35, 83; Randles and Fuller, Mystery Solved 88-89, 148-149, 161, 163, 216. Note that both Meaden, and Randles and Fuller also deal with animal reactions to vortices and UFO encounters.



Figure 1.9: Vertical regrowth of damaged crop at Chilcomb Farm Compare this with the photograph in figure 1.11 on page 45 which shows the same formation recently after its creation.

national Conference on the Circles Effect in June of that year. In this case
a giant circle surrounded by three rings gained a fourth one concentric with
the circle centre. At Other such phenomena include the sharing of satellites
by formations created at different dates. At

Summary

The preceding section has attempted to give a comprehensive overview of the various phenomena that comprise the crop circle phenomenon. Other details to do with the formation of circles are essentially theory-dependent and are dealt with later. Eyewitness accounts of phenomena associated with the formation of circles are also dealt with at a later point as they tend mainly to be used as evidence by the meteorological school of explanation. The intent of the above text is to delimit the nature of the phenomenon. It should be noted that a lot of the information is not widely known and that this fact has important consequences for various systems of beliefs about circles.

Finally it should be noted that the description is inevitably dry and prosaic and fails to capture the wonder and beauty of the formations. More so than the thousands of words of detailed descriptions of the phenomena,

²⁴Before and after aerial photographs of the formation can be found in Delgado and Andrews Latest Evidence 40-41; Noyes, Enigma 93. Discussion of the debate at the conference between Menden and Andrews can be found in Latest Evidence 40-41; and Fuller, editorial 3: 8.

²⁵ See for example colour photographs in Noyes, Enigma 92.

it is the aerial photographs that have brought home to millions the sheer strangeness of the crop circles.

1.2 Circular Movement

When the Daily Express ran the crop circle story in July 1983 they introduced the general public to a mystery that had gradually been building up steam. Although there had been a growing interest amongst researchers in the phenomenon there was little public discussion. Articles had been featured in local press publications but were rarely given prominence. The Express's headline changed all that. The next day they ran a follow-up story, headlined "E.T. Why haven't you contacted us??" and other national papers gave coverage to the story: eventually leading one team from the Daily Mirror to create a second formation in the same field in an attempt to discredit the Express if it should report the formation as real.²⁷

1.2.1 The dawn of a new mystery: 1980-1983

The circles reported in 1983 caused something of a stir,, but they were not the first to be nationally reported. In 1981, a three circle formation at Cheesefoot bottom came to the attention of Pat Delgado, a well-known writer on paranormal issues. He immediately reported them to the press and so the formation gained national publicity but there was no significant lasting interest. Delgado was not at the time aware that Terence Meaden, editor

²⁶Qtd. in Meaden, "Circles From the Sky" 22.

²⁷For a fuller account of the events surrounding these events see Raudles and Fuller, A Mystery Solved 11, 63-64.

of The Journal of Meteorology, UK had investigated a circle formation the previous year after Ian Mrzyglod, a leading investigator with the British UFO Research Organisation (BUFORA), had drawn his attention to it. Both men were of the opinion that the marks could be caused by a type of whirlwind.²⁸

Meaden's stance was fairly obvious, he had long been interested in anomalous weather reports and the circle formations must have seemed to embody all the things which were of interest to him. Mrzyglod's position was less obvious. At the time he was the editor of Probe, a journal dealing with UFO phenomena, which mostly represented a certain faction of BHFORA that rejected the extraterrestrial hypothesis (ETH) of the UPO mystery. To put it crudely, they believed that UFOs were not alien spaceships ("flying saucers") of any sort. This faction consisted of a small but dedicated core who were fighting a rearguard action against the ETH majority. This group, also consisting of Jenny Randles and Paul Fuller who were later to become heavily involved in the crop circle debate, saw with horror the way in which the local press had been reporting the crop circle marks and feared that the association of crop circles with flying saucers and "little green men" would further discredit scientific research of UFOs.

Even at this early stage several schools of approach were emerging. In one corner was Meaden who saw crop circles as a possible life's work and was quietly gathering as much information as possible. In another were Randles,

²⁸ Meaden, "Mystery Spirals in Cornfields"; See also the Probe articles by Ian Mrzyglod.

Fuller and Mrzyglod who were desperately trying to divorce UFOs from the crop circles. Finally there were the likes of Pat Delgado who saw them as something rich and strange and believed that the world should be shown.

1.2.2 The early years: 1983-1988

Randles and Fuller date the summer of 1983 as the start of the crop circle
"myth" (Mystery Solved 28). The use of the term is unfortunate in that they
intend it to refer to a complex of erroneous beliefs about the phenomenon.
Their concern was that the phenomenon was being confused by the increase
of interest in it. They state:

No longer could we be sure we were dealing with a phenomenon that was occurring without the intervention of social factors.... Overnight the entire circles phenomenon had been complicated by the involvement of the media in such a big way. (28)

The media interest was intense but also brief. It appears to have started in a regional newspaper, The Wiltshire Times, which reported the existence of a quintuplet formation at Cheesefoot. This formation, consisting of a large central circle and four smaller satellites (illustrated in figure 1.10), appeared to be a shape that could be interpreted as the landing marks of a flying saucer with four legs. The next day the Wiltshire Times advised its readers to "Watch Out! The Martians Are Back". The affair culminated in several television news reports and the Daily Express's "E.T." coverage. Eventually the happenings were reported in an American tabloid, Weekly World News.

Figure 1.10: Schematic illustration of a quintuplet formation.
It can be seen that this shape fits a popular conception of UFOs as circular objects with four equally spaced landing legs.

which noted that a UFO had landed in Wiltshire and terrified local farmers (27).

The next two summers were relatively quiet in terms of crop circle interest.

Although formations were still being discovered on a fairly regular basis they rarely received national coverage. Noves recounts that:

[The Circles] hardly looked like a major problem for science. They seemed to be increasing a little from year to year, but only to the modest extent which might be expected from the fact that more people were looking for them. (Introduction 21)

However, 1985 was notable for the introduction of 'Busty' Taylor to the mystery. Taylor, a keen pilot happened to notice a formation whilst flying over it and returned the next day to take some aerial photographs.²⁰ Shortly thereafter he came into contact with the, then, small core of circles enthusiasts and suddenly there was a new dimension to their research—aerial photography.

²⁹See Delgado and Andrews, Circular Endence 11, 32-35.

The role of aerial reconnaissance and photography proved vital to the spread of interest in the phenomenon. Firstly it allowed researchers to cover a much larger area and to see formations in fields that were not accessible from roadside viewpoints. In 1989 Paul Fuller published statistics that indicated that maybe 90% of all the formations could be going undiscovered (Controversy 87-93). His figures, whilst undoubtedly accurate at the time of the survey in 1987, were largely compiled before the advent of systematic aerial reconnaissance and it must be assumed that there is now a much higher detection rate. This has contributed greatly to the massive spread of information about the phenomenon. Perhaps even more important has been the impact of the photographs. Mr. Taylor has the habit of taking the best of his shots, framed and enlarged, to as many lectures, seminars and conferences as possible. Time after time onlookers crowd around, staring in wonder and stunned incomprehension. In the manner of photographs of UFO's and other strange phenomena, only so much more clearly and without a question as to their veracity, the images pose a question that simply has to be answered. What caused these marks?

The events of 1986 seem to have foreshadowed much that was to occur a few years later. The first contemporary ringed circles were discovered and several other types of unusual formations came to light for the first time. Until that time only circles with a clockwise spiral lay had been discovered; Terence Meaden had in fact commented on this in an earlier article. 30 Noves writes that:

What is beyond doubt, however, is that the phenomenon was suddenly on the move again. (Introduction 21)

Underlying this quote is the belief that represented a growing school of thought in circles research: that some type of conscious intent could be imputed to the circle formations, in terms of both their shapes and their positions. With time the polarization in views between those who proposed a meteorological explanation and those who saw some form of intelligent guidance behind the phenomenon would lead to an acrimonious split from which the field appears unlikely to recover.

Whether or not the phenomenon was evolving, the sophistication and complexity of the research effort certainly was. The CRIES database, run by Terence Meaden, records a staggering increase in reported sightings throughout the decade of the 1980s. There were approximately as many circles in 1988 as the whole of 1980–1987 combined — about 120. In 1989 alone there were some 300 reported circles. In 1990 there were at least 500 counted and further data is still being received.

³⁰Noted in Noyes, Introduction 21. Apparently in G. T. Meaden, J. Metrorology UK (1985): 73-80.

³³The numbers given are imprecise because there is no consensus on how to actually count formations. Adde from the difficulty in sorting out heaves from the real thing there is debate as to, for example, whether a quintuplet formation should count as one or for circles. Similarly some fields have had Tyapeshow, circles, a grouping of small circle detted around a field, associated with other formations. No one is too sure about how to count those.

With the increasing flow of information came renewed public interest. As well as reports in newspapers, circles researchers found themselves being the subject of interviews for radio and television. More and more often they were being asked for their opinions and gradually their mutual fascination with the subject was eclipsed by a destructive debate. Throughout the local and national media a war gradually broke loose. In the Leicester Mercury Pat Delgado stated that:

A natural force could not create such intriguing patterns.

A few days later Meaden reposted that:

[Some people] believe these circles were formed by UFOs. That's nothing but pie in the sky which is wasting a lot of people's time.³²

As John Michell wrote in his 1989 review of the crop circle literature:

The rift has divided both scientists and ufologists not against each other but within their own ranks, causing feuds and broken friendships. ("Quarrels" 43)

1.2.3 The modern era: 1989 to today

In the same way that 1983 marked a watershed in the evolution of the social phenomenon, 1989 seemed to mark the evolution of a national obsession. Until then the researchers had been largely ignored as 'cranks' working on a fringe problem. After the events of that summer and the publication of

³²Quotes are from Randles and Fuller, Mystery Solved 29.

three books, one of which, Circular Evidence, became a best-seller, it became nearly impossible to live in Britain and not to know about the phenomenon.

By the summer of 1989 the battlelines had been fully drawn. On one side were those who supported the theory that:

...the circles are created by an unknown force field manipulated by an unknown intelligence. (Delgado and Andrews, Circular Evidence 169)

These included the vast body of people who were to become the Centre for Crop Circle Studies in March 1990. On the other were the meteorological camp comprising of Terence Meaden, Jenny Randles, Paul Fuller and a growing body of atmospheric physicists from Japan and America. Ironically, although the division of people was the same as 1983, their positions on UFO involvement had changed dramatically.

Originally those who saw a non-human intelligence behind the circles assumed there was some kind of UFO connection with them. In particular there seemed to be similarities between the circles and various so-called "saucer nests" that had occasionally been discovered. Writing in FSR in 1982 Pat Delgado argued strongly for a UFO background to the crop circles and again in 1983 argued that they were caused by unknown forces. However it should be noted that the "nuts and bolts" theory of UFO's has never gained much popularity amongst ufologists in Britain. St Its seems that

³³ The connection between saucer nests and crop circles is discussed at length later.

³⁴Otd. in Randles and Fuller Mystery Solved 7, 11.

³⁵ The study of ufology in Britain and Europe has not been as totally dominated by

the supernaturalist explanation in Britain has looked to some form of a nonphysical, non-terrestrial origin for UFOs. This led the authors of Circular Eridence to include many passages indicating a possible UFO connection in the book whilst denying that these marks proved that flying saucers had actually landed. They also freely reported and speculated about the existence of circles that predate the current era (25, 37, 55-56, 64).

Current thought amongst cereologists appears to favour a metaphysical basis to the phenomenon. Delgado has repeatedly complained about the media's interest in "little green men" (Circular Evidence 11) although even in 1988 he was writing:

Many circles and rings are connected with UFO sightings.... UFOs are claimed to be capable of of producing the most extraordinary behaviour and phenomena. Their control of force fields unknown to us may well result in rings and circles. (168)

The current view of this school, although it is an oversimplification to treat all those in this area as a homogenous mass, is probably more accurately represented by Michael Green.

It is my view that we are witnessing the unparalleled intervention of a non-human, intelligent life-form attempting to communicate with humanity using both auditory and visual means. The crop

the Extraterrestrial hypothesis as it has in America. Consequently there has been much less interest in the search for physical proof of their existence. This is perhaps one of the crucial clues to the understanding of the various explanations for crop circles and I deal with it at length later.

³⁶There are of course various schools of thought, such as the psycho-social hypothesis (Evans), the ETH and some who take the view that there maybe some fundamentally understandable parapsychological explanation (Randles UFOs).

circles are thus a physical statement of meta-physical realities in the fields of Britain ${\rm today.}^{37}$

The interest is in the "circlemakers" and the meaning of the code they are tapping out on the cornfields of Britain.

On the other hand the meteorological school have enthusiastically embraced the UFO phenomenon. Meaden's first approximation to an explanation, involving a type of unknown stationary whirlwind, has long been abandoned for a much more complex form of ionized vortex that poses severe challenges to those working in boundary-level atmospheric physics. A fuller exposition is given later, at this point it is enough to note that several of the postulated effects of an electrically-charged vortex appear to match those experienced in many, otherwise unexplained, UFO cases. This has been taken up by Randles and Fuller, amongst others, who believe that it is possible to subsume the field of ufology within that of meteorology. As they say in Meaden and Elsom:

As a consequence we can say that UFO research in its own right is now dead and has become a part of meteorology! (92)

When George Wingfield, as implacable an opponent of the meteorological as they come, writes that "the circles have radically altered the perception of the world held by those of us engaged in this research" ("Beyond" 110), his words are as true of his bitterest opponents as they are of anyone else. Paul Fuller cheerfully admits that:

³⁷Qtd. in Beaumont, "The Mystery Deepens," 37.

We started this to prove that crop circles had nothing to do with UFO's. We were totally convinced of that and of course now we find out that they have everything to do with them. I don't mean we've fully explained the UFO problem but I think we've made a tremendous advance. (Personal interview, Sept. 1990)

In some ways this split has increased the media interest in the phemomenon, for it is probably a truism to observe that nothing sells papers like a good argument. For example, the Western Daily Press ran an article on June 12^{2h} 1990 entitled "Circle Watchers' War" which examined the debate amongst the various researchers. Also the fact that there are competing explanations allows the papers a chance to speculate and list the various possibilities.

The events of 1989 added further grist to the mill. For the first time Daytime Line, a programme broadcast live during the day on BBC 1, began to continuously monitor and report the phenomenon, relying heavily on Colin Andrews, a leading cereologist, as an acknowledged expert. This gave the impression of conveying an unfolding depiction of the course of events as more and different types of circles were found throughout the country, though still the majority were found in the Wessex area.

The extra exposure that the phenomenon gained from Daytime Live combined with the inherently sensationalistic nature of such reporting, led to many of the more unusual events being made prominent. Notable amongst these was the report from Beckhampton. Delgado and Andrews were to be interviewed in a 40m diameter circle. However each time the film crew approached the circle their camera began to malfunction and a high-pitched warbling noise could be heard over the headphones. The interview was a total failure and £50,000 of equipment had to be rebuilt. The events were finally broadcast on Halloween 1989, stressing the strangeness of all that occurred.²⁸

This was also the year in which various runours taking the phenomenon as their point of departure swept around the country. Whereas previously the reporting of the incidents in the press had either been humorous or merely played the views of one or more of the researchers against each other, now various events were printed as news. Randles and Fuller deal skeptically with these rumours, "media myths" as they call them, at length (Alystery 88-99). Here it will suffice to give a brief overview of the various rumours that surfaced throughout the year.

"The alien substance." In 1985, in the first circle he visited, "Busty" Taylor discovered a translucent, gelatinous substance. This was sent for analysis to two laboratories one of which refused to come to a conclusion whilst the other provisionally concluded that it was a decayed piece of confectionary but noted that it did not seem to contain glucose. In 1989 this story surfaced in the media in various forms, often implying that the substance had been found this year, in several different places and stating that

³⁸Broadcast October 31st 1989. See also Delgado and Andrews, The Latest Evidence 8-11; Wingfield, "Ever Increasing Circles" 24.

it could be a health risk 39

"The food scare." Allied to the health hazard of the alien substance reports began to circulate that damaged crops from circles could be dangerous to eat. This appeared in several papers although its effects do not seem to have been very dramatic. The basis of the rumour was the apparent molecular changes to damaged crops discovered by Delgado and Andrews.

Army involvement. Several reports surfaced that the Ministry of Defence was taking an active interest in the subject. Certainly army helicopters had been seen over some formations and may even have been taking photographs. Also many circles have been found on Salisbury Plain, an area of great military sensitivity. Naturally the appropriate authorities deny that they have any interest.

The Queen. There were also various reports that the Queen was taking a personal interest in the events and had spoken to the Prime Minister, Margaret Thatcher. This was used to emphasize the importance of what was going on. The truth of this is unknown because there has been no comment from any of the parties involved.

In the midst of these rumours the first media-based crop-watch was organised by Colin Andrews and Pat Delgado, who believed that there was

³⁹ See Randles and Fuller, 84-85, 88; Delgado and Andrews, Circular Evidence, 34-35.

some kind of non-human, guiding intelligence behind the phenomenon. It lasted over a week and involved intensive use of video cameras and monitoring by observers. They set up overlooking the Punch Bowl at Cheesefnot. from June 10th to 18th hoping to see a circle in the making. Instead, for the period they were looking there were no reports of any circles anywhere in the country, until the morning after when one was found in a field behind the operation which was not being monitored. At least that is what the world was originally told (Michell; "Quarrels" 47).

This failure was seized upon by the Cercologists who asserted that it proved that an intelligence did control placement and formation of the circles and that this was its way of teaching them a lesson. Researchers began to wonder if there might be links to old English corn spirits such as Puck and Robin Goodfellow who were always keen to play tricks on the gullible. However a fuller account of events during Operation White Grow has begun to emerge. It seems that an inner circle of researchers had received an anonymous message through the post that vold them to meditate within a circle on one night. Whilst doing so an anomalous series of events occurred in which the participants believe that they may have had contact with some kind of supernatural presence. A full account of these events is given later. 41

The situation was further inflamed by the publication of the first three

⁴⁰See for example Rickard; "Folklore"; Michell, "What Mean These Marks?" 57.

⁴¹Published versions of the events are in, Beaumont, "More Circular Evidence" 25 27; Delgado and Andrews, Latest Evidence 10-13; Wingfield, "Ever Increasing Circles" 18 25.

brooks on the subject, one of which (Circular Evidence) stayed on the bestseller lists for five weeks. Of the three publications Controversy of the Circles
was a BUFORA report and did not receive wide-spread distribution. The
third book, Meaden's The Circles Effect and its Mysteries, provided an official statement of the meteorological explanation and was published by his
own in-house firm, Artech. It quickly went into second edition but, unlike Circular Evidence, which relied largely on a stunning series of colour
photographs allied to descriptive passages dealing with the more interesting
formations, it does not seem to have received much popular success. Circular
Evidence became so popular that it went into a paper-back edition and the
photograph on its dust-jacket was republished as a postcard.

It seemed as if the year was progressing to some sort of climax that would reveal something of the secrets of the circles. Questions had been asked in Parliament, if circles had been seen and discussed throughout the popular media, there had been food scares. It had been a long and hot summer, and then, on July 30th, a report began to circulate that a series of 98 tadpoleshaped circles had been found in the Welsh Black Mountains. Not only was this type new but so was the place, and the numbers were unprecedented. Colin Andrews was quoted in the Sunday Express as saving:

We believe we have something of major importance.... We can eliminate the hoax theory once and for all. (30 Jul. 1989)

¹² Noyes, "Is Whitehall Hiding Something"; Randles and Fuller, Enigma 95.

Instead, it seems that the circles were the result of the farmer cutting areas in which grouse could settle, his usual practice. The press found this hilarious. Perhaps, more importantly, a belief began to grow that all circles could be explained this way. For instance, a report was published on CBC radio, a Canadian national radio service, that asserted that all circles were either hoaxes or the result of farming practices. It seemed that the media season was dying away.

The new lack of media interest meant that possibly the most incredible of the 1989 formations went largely unreported. On August 12th the last circle of the year arrived and it had cerologists dancing in the streets. The formation is often known as the swastika because of its internal structure which consisted of an inner circle, surrounded by quartered quadrants and an outer rim. A text description of this formation is inadequate; it is probably the most spectacular of Busty Taylor's photographs and appears on the front of The Crop Gircle Enigma. It has been used to prove that circles can not possibly be created by "whirlwinds", and has lead many, to declare the meteorological theory "dead". **

Rumours of the demise of the meteorological explanation may have been somewhat exaggerated but the events of 1989 caused all concerned to take stock. The two main developments in the "off-season", winter, when there

⁴³The events are summarized in, Wingfield, "Ever Increasing Circles" 26.

⁴⁴See for example George Wingfield's comments in, "Beyond the Current Paradigms" 99, and "Ever Increasing Circles" 34.

are no crops in which circles can appear, were the formation of the Centre for Grop Circle Studies (CCCS) and the setting up of the First International Conference on the Circles Effect by Terence Meaden and the director of the Tornado and Storm Research Organisation (TORRO), Derek Elsom.

GCCS advertised itself as a theory-neutral clearing house that would provide a central database and archive for crop circle material. In practice it is run by a group of people, not including Pat Delgado and Colin Andrews, who largely reject the meteorological explanation and who, in some cases, reject even the idea of trying to explain the crop circles. The organisation appears to be growing rapidly and has affiliated with most other research efforts, including Terence Meaden's CERES database and Circles Phenomenon Research (CPR) run by Colin Andrews and Pat Delgado. Also the CCCS declared its intention to publish a triannual journal, The Cereologist, which would act as a method of publishing information and articles about the phenomenon.

1990 The year of the pictograms

Interviewed in Kindred Spirit in 1990 George Wingfield said that:

In January 1990 we were told by the medium Isabelle Kingston that she had received channeled communications saying that the Circles this year would be 'completely different.' (Beaumont, "Mystery" 32)

⁴⁵ See for example, John Michell, "What Mean These Marks?"

It was perhaps a predictable prediction but certainly the formations in 1990 took on a whole new dimension.

The season started earlier than mormal, with the first new formations coming to light in late April. It was, however, a crop circle known as "Big Bertha" found in Wittshire in late May that restarted the media interest in earnest. ** The circle itself was huge, being over 60m in diameter, and with the rings included the diameter measured nearly 100m. The press was full of it and paid only lip-service to the farmer's pleas not to publicize its location. He had lost enough of his barley in the circle and the last thing he wanted was interested tourists trampling even more down.

Even more startling than giant circles in Wiltshire was the arrival of "pic tograms" in Hampshire. The first appeared at Chilcomb farm in May, just a few hundred metres away from the Punch Bowl. A photograph of the formation is shown in figure 1.11. The formation consisting of circles, spurs and rectangles seemed to revolutionize the phenomenon. Originally suspecting hoaxing, Fuller told the press that he thought the rectangles had been added to a genuine, simpler formation but he later retracted his comments after visiting it.

This was to be just the first of many. Before the end of June there were three different pictograms in the fields around the farm as well as circular marks at the Punch Bowl and elsewhere. The countryside in the area looked

⁴⁶The increasing habit of naming circles, especially the pictograms, will be discussed later.



Figure 1.11: The first pictogram of 1990: Chilcomb Farm

bizarre. I watched as cars parked by the roadside and their occupants decamped to take photographs and stare in wonderment. A whole minibus full of Dutch school children on their way to Winchester stopped whilst they took photographs. In June it was nearly impossible to stand near a circle and not meet someone. It was in this atmosphere that the crop circles conference, which promised an explanation of the phenomenon, was eagerly anticipated.

The organizers of the conference were astounded by the public interest in it. They hired a hall with 150 seats and ended up with over 300 applications. ⁴⁷ It had been promoted as a conference about an issue in meteorology and had not initially been widely advertised. However several newspapers had run

⁴⁷Meaden, "Crop Circles Mystery" 284.

stories about the forthcoming conference and the general public flocked to it.

In the morning the hall was totally full, by mid-afternoon perhaps a quarter
of the seats were empty. For many the complicated mathematics and physical
models proved just too hard to follow. It was, after all, a conference run by
atmospheric physicists for atmospheric physicists.

It was at the end of the conference when fireworks crupted. The last paper was being given by Jenny Randles and Paul Puller who were attempting to extended Meaden's explanation for crop circles to the UFO phenomenon. They were running overtime into the hour devoted to open questions and various members of the audience, including Colin Andrews and an associated film crew, were stirring restlessly. Eventually, the paper ended and suddenly Meaden found himself being questioned by a largely unconvinced audience. It was his answer to a question about the pictograms in Hampshire, which he described as "aberrant forms", that seemed to spark the major confrontation between him and Colin Andrews.

The personal dislike that has grown between the two was immediately obvious. As soon as Andrews started, Meaden's body peature tensed up and Randles and Fuller, still at the podium, began to speak quietly to each other, with Paul Fuller shaking his head at Andrews' points. Andrews started with a question about the law of conservation of angular momentum and its application to the pictograms. Meaden replied that the formation displayed internal structure and implied that Andrews did not understand the principle. This only added to the atmosphere. Andrews, a practiced media performer began to raise his voice, whilst Meaden, a diffident public speaker, began to turn pink. On the whole, the general audience supported Andrews' comments whereas the meteorologists and a few others began to clearly become annoyed. Snow, a meteorologist from Purdue University in Indiana, turned to the Japanese guests and tried to explain what was going on.

Andrews next stated that some circles had been revisited by whatever the circles effect was and that, for example, the Bishop's Canning formation "Big Bertha" – had grown an extra ring. Meaden asked to see proof and stated that it could anyway have been caused by hoaxing or have just been missed in the earlier surveys. The whole time the film crew was capturing the argument for later be-adeast and the audience was responding with a mis of anger, embarrassment and encouragement.

By now Andrews was in full flow and claiming to have proof of the molecular changes in affected plants and the backing of several important physicists. Meaden asked him to name his sources but Andrews refused claiming that they were not willing to be identified yet. This annoyed Meaden who accused Andrews of forever making statements but never backing them up, and at this point he picked up a few wheat stalks that had been affected by a circle formation and brandished them at Andrews. Realising that the conference was in danger of totally disintegrating, the organizer, Derek Elsom, called a halt to proceedings. Civil applause greeted the closing address but as soon as the conference was over the debate continued in the corridors and coffee rooms even more intensely than before. The split was wider than ever. 18

The fall out from the conference continued throughout July, with various reports on what had happened and what, if anything, had been solved, but it was on July 11th that the level of interest reached fever pitch with a new formation at Alton Barnes, in the Vale of Pevsavy in Wiltshire. The formation, shown in figure 1.12, was a vast double pictogram over 80 metres long. The various circles had "keys" and "claws" pointing from them and rings around them. The sheer scale and beauty was astounding and researchers, film crews, journalists, and tourists visited in their thousands. The farmer, making the most of a difficult situation, saw a chance to make a profit and charged £1 a head to enter the field, whilst ensuring that people did as little damage to the surrounding crop as possible. Given that somewhere between 5,000–10,0000 people visited the formation, it can be assumed that he made money from the affair.

The Alton Barnes pictogram was front page news for a week. Papers wrote editorials, published cartoons and printed interviews. It made local, national and international news. A hot dog stall was set up by the field side, Alton Barnes T-shirts were printed and the rock band, Led Zeppelin, used an aerial photograph of it on the cover of a collection album. At the Contemporary Legend Conference in Sheffield, Sherril Mulhern, giving a paper on

⁴⁸Other accounts of the conference can be found in Delgado and Andrews, Latest End dence 40-41; Fuller, editorial Crop Watcher 3; Noves, "The Oxford Conference".

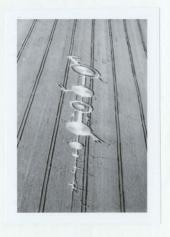


Figure 1.12: Pictogram at Alton Barnes in Wiltshire The most famous formation of them all. \odot G. T. Meaden.

"Saucers, Satan and Psychotherapy", decided not to comment on 'saucers' because maybe the crop circles had invalidated what she had to say. Every time one travelled through the countryside in July one could see people looking out of windows in the hope that they would see a circle. No one was immune.

It was in the middle of all this that "Operation Blackbird" was started.

The biggest, most expensive crop watch ever organised would last for a week
overlooking the fields at Bratton, in Wiltshire. For several days the nation
watched, wondering if we would at long last see a crop circle form. Then,
on July 29th, Colin Andrews amounced on early-morning television that the
team had caught a circle forming on an infra-red video camera and were
about to go to investigate. As Pat Delgado and Colin Andrews marched
down through the field three planes flew overhead in a 'V' formation. When
they finally reached the formation, they found more than they expected. In
the middle of each circle was a cross and a copy of a children's game called
"Horoscope." The formation at Bratton, shown in figure 1.13, was a boax. 32

The press had a field day. Suddenly, just as with the Black Monntant

The press had a field day. Suddenly, just as with the Black Mountain case of the previous year, everyone decided that the whole phenomenon was a hoax. Several papers published guides on how to hoax a crop circle. One individual stated that he had been hoaxing circles since 1943 and claimed the £10,000 prize offered by a daily newspaper to the first person who could

⁴⁹ Meaden, "When is a Crop Circle Not a Crop Circle?"; Wingfield, "A Carefully Planned Hoav."



Figure 1.13: Hoaxed formation at Bratton during Operation Blackbird Photograph is © G. T. Meaden.

furnish an undisputed explanation of the phenomenon. To It seemed that the whole year had come full circle. This was not just a media belief. I talked with a distinguished folklore professor in March 1991 whilst I was looking for folklore antecedents and explained what I was doing. In turn he replied,

Of course now they've all been proven hoaxes everyone's scrabbling around trying to prove they're in folklore.⁵¹

This was the same person who had advised me in May 1990 to look into the literature on Standing Stones because he thought the symbolism was similar.

51 John Widdowson, Personal communication.

 $^{^{50}}$ "How To Make Those Corn Circles". The Koestler foundation has also offered a £5,000 reward to anyone solving the mystery.

In an uncanny repeat of the year before, after the exposure of the beax several unusual formations were found, including more pictograms, and perhaps most surprisingly a triangle. After the disappointments at Bratton, the triangle provided hope for the cereologists, who saw it as one more sign that the meteorological theory was dead. Meaden counter-attacked by publishing a survey which showed the fundamentally circular structure of the triangle ("Beckhampton Scrolls"). Despite the lack of media interest, 1990 ended as controversially as it began.

The close season of 1990 saw a huge expanse in the literature on the subject. Delgado and Andrews published a sequel to Circular Evidence named Crop Circles: The Latest Evidence, which covered some of the formations from 1989 and 1990. CCCS published their first work, an anthology edited by Ralph Noyes which printed articles by Terence Meaden and George Wingfield side-by-side as representative of the two main viewpoints. Randles and Fuller massively revised and expanded their BUFORA report and published it as Crop Circles: A Mystery Solved. With all this activity BUFORA and the British Society of Dowsers both held lectures on the phenomenon, and the CCCS instituted a series of monthly lectures. The activity was intense; the CCCS published their journal, The Cercologist which drew an immediate response from Paul Fuller who instituted a semi-satirical journal named The Crop Watcher. In the midst of this a third journal, The Circular, was started.

with the aim of being less divisive than the other two.52

The debate continues now in the pubs and meetings, in the journals and books. Meaden and Elsom published the proceedings of the Circles Conference as The Circles Mystery. The CCCS has issued a standardized form on which to report circle formations and held its first Annual General Meeting in April. Meaden continues publishing data in the Journal of Meteorology, IVK and all are waiting, with bated breath for the cropfield wonders that 1991 may bring.

³² The Circular has now become an official journal for the CCCS. Also, whilst revising this section, The Cercologist changed its name to The Cereologist with issue 3 and severed its formal ties with the CCCS, though it still maintains, apparently, close ties with the organi action.

1.3 The Prehistory of the Circles

Inevitably, with the interest in the phenomenon has come an attempt to discover an historical basis to the current events. This has taken two forms: fieldwork attempting to discover anecdotal evidence, mostly gathered from farmers, of crop circles predating the 1980s. allied to a search for earlier reports in local newspapers; and an investigation into British folklore in an attempt to see if there are folklore accounts that mention the phenomenon and therefore indicate that there are historical precedents for the modern formations. So far the results have been ambiguous. In Circular Emicience Delgado and Andrews stated that:

The formation of circle groups has probably occurred for hundreds of years. (118)

This view is supported by Meaden who asserts that the CERES database contains over 100 formations predating the 1980s, and he has published several eyewitness accounts in the pages of the Journal of Meteorology, UK.53 There is however debate as to the relevance of such anecdotal evidence. Generally, those who take a meteorological standpoint are happy to use such reports as data but many who take an opposing viewpoint remain unconvinced. Noyes states:

We can never be quite sure whether what is being recounted is the recollection of some roughly circular damage, perhaps caused

⁵³See issues: 140, 265-270; 145, 3-6; 154, 389; 155, 18. Other accounts can be found in "3 More Eye-Witness Accounts" and Fuller, "Some Further Eye Accounts."

by animals or the weather, but now being given the retrospective glamour of modern occurrences. ("As Old as Adam" 60)

Similarly in his account of the 1988 crop circles Wingfield notes that , such reports can not be verified since there is no photographic evidence to confirm that this was indeed the same phenomenon.

This issue is vital to the various explanations on offer and consequently has engendered a lot of ill-feeding. A lot of time and energy has been spent by various researchers attempting to prove or disprove the existence of the phenomenon in the near and distant past. Bearing this in mind I will deal with these problems in the context of their associated explanations in a later chapter. However it would be fruitful now to deal with the circles researchers' search through folklore materials in their attempt to discover whether or not there is any kind of body of tradition that supports a folk knowledge of the phenomenon of geometric copp flattening.

1.3.1 Circles and folklore

To date there has been very little evidence gleaned from the folklore archives in the UK that indicates any kind of historical precedent for the modern phenomenon. What evidence there is, has been eagerly analysed from a series of perspectives.

At the First International Conference on the Circle's Effect held in Oxford in 1990 Terence Meaden gave two putative folkloric accounts of possible circle formation (19-21). The major example referred to the "Mowing Devil" pamphlet (to be studied in more detail on page 57), which purports to be an account from 1678. The minor case comes from Scott's Minstriky of The Scottish Border. Meaden quotes his account of Fairy Ring phenomena.

The fairies of Scotland...inhabit the interior of green hills, chiefly those of conical form...on which they lead their dances be meanlight; impressing upon the surface the mark of circles, which sometimes appear yellow and blasted, semetimes of a deep green hue: and within which it is dangerous to skeep, or to be found after sunset. ("Circles from the Skx" 22.)

Previously such fairy rings have been assumed to refer to the fungal growth that appears in grass and grows outwards, in an approximately circular manner. There is a vast body of general fairy lore that has been collected from the UK and Ireland as well as analogous beliefs throughout Europe and north America. If some of the fairy ring cases do represent crop circles then a hoge re-evaluation will need to occur. However, the matter currently remains unresolved due to a lack of succific details in oral tradition.

The problem of the confusion between crop circle accounts and fungal fairy rings is acute and tends only to confuse the situation. For example, on 16 August 1990 The Duly Telegraph, whilst reviewing Grap Circles: A Mystery Solved, mistakenly announced that the crop circle problem had been solved 300 years ago by one Professor Robert Plot. Plot was a natural philosopher who also edited Philosophical Transactions, the journal of the Royal Society. His main interest was in unusual phenomena of all kinds.

and be can be seen as an ancestor to the gentlemen folklorists of Victorian Britain. In 1696 he published his Natural History of Staffordshire, part of which consisted of a treatise on fairy rings and an explanation of their origius. He accounted for them as the residue of lightning strikes on the ground (9–10, 15–19; 28).

Plot's account of fairy rings is accurate and detailed enough for one to be confident that he intends only to deal with those phenomena that we now recognise as fungal fairy rings. However as Bob Rickard points out:

Given his range of interests and his network of learned correspondents, 1 feel sure that he (more than anyone else) would have known of the phenomenon of crop-circles had they occurred and been discussed at that time. (68)

Rickard's point is valid in so much as it is conceivable that crop circles could have occurred and not been discussed. Regardless, his work does demonstrate that very close attention had been paid to a scientific investigation of fairy rings and, it seems almost inconceivable that Plot could have confused the two phenomena.

The "Mowing Devil"

The pamphlet popularly referred to as "The Mowing Devil" has begun to play a central part in the discourse engendered by the crop circle phenomenon. Since its discovery in 1989, by several independently working researchers, its influence on the phenomenon has been pervasive. It seems that no account of the modern phenomenon can be given without reference to the Mowing Devil. Consequently it is useful to give an exposition of its discovery and contents.

The Mowing Devil pamphliet is one of eighteen that were published by the folklorist W. B. Gerish between the dates of 1905–1915 and distributed by the East Hertfordshire Archaeological Society. In the fourteenth he published an account from a chapbook published in 1678 which told the take of how a greedy farmer lost his oats. When he first published it Gerish noted in his introduction that "the whole story is, of course, purely imaginary..." (10). Yet, over 300 years later, the woodcut that formed the frontispove of the original chapbook was reproduced on the front of the Journal of Meteorology, UK with the proclamation that this represented the first, definitive account of a genuine crop circle in antiquity.⁴⁴

The chapbook was printed on 22nd August 1678 and told of events in Hertfordshire that had happened "within the compass of the present month of August." These events were apparently discussed throughout the country due to the unique nature of what had occurred.

A summary of the chapbook. A rich farmer sent to a poor neighbour, whom he knew to be a mower, to cut his three-and-a-half acres of oats. The

⁵ The original pamphlets can be found at the Hertfordshire County Library and in private collections. The account itself is published in full, along with the other 17 pamphlets, in Gerish, Hertfordshire Folklore. Other versions of it can be found in Lewis Evans, Jones Baker: Rickard and Sievekine. The full text of the chapbook is reproduced in Aupendix A.

labourer asked a high price for his services which annoyed the farmer who then offered him far beneath the common rate. The two then began to argue and when the labourer, desperate for work, finally agreed to an even lower rate than first offered, the farmer would have nothing more to do with him and stated "That the Devil himself should Mow his Oats before the mower' should have anything to do with them."

Later that night several passers-by saw flames in the farmer's field and the next morning several of them took the news to him. Fearfully they went to the field expecting to see the whole crop burnt down. Instead they found the crop already mowed. As the account concludes.

, and as if the Devil had a mind to shew his dexterity in the art of Husbandry, and sown'd to mow them after the usual manner, he cut them in round circles, and plac't every one with that exactness that it would have taken up above an Age, for any man to perform what he did that one night: And the man that owns them is as vet farial to remove them.

This descriptive details within this narrative correspond to many of those in the current phenomenon.

- It occurs in August in a ripe cereal crop in this case oats.
- There is an association of luminous, nighttime phenomena with the circle formation.
- · The crop was not laid in a random pattern but carefully placed.

 The woodcut appears to show the Devil cutting a single, possibly ringed circle into the field.

There is the obvious dissimilarity with the reference to the oats having been moved rather than just flattened. The argument is that the oral transmission of the narrative favoured a description that fitted nicely with the unwise imprecation to the Devil and, thus the image was of a mown circle when, in actuality, it was flattened. It is assumed that the author of the narrative synthesised the versions he heard into one coherent story.

Other folklore issues

Aside from the discovery of the Mowing Devil and the debate over whether texts describing fairy rings can be said to be at least a partial confusion with crop circles, there has been little, if anything, found in the various texts. This has been taken by many to indicate that crop circles are a uniquely modern phenomenon. For example Bob Rickard, a Fortean researcher and proponent of the hoax explanation, notes that James Frazer spends a whole volume of The Golden Bough detailing the various beliefs and practices associated with harvest time and specifically deals with folk beliefs about spirits that "run" through the corn and cause it to wave, 55 yet there is nothing in this huge collection to indicate that Frazer was even aware of crop circles.

⁵⁵ Frazer, The Golden Bough Part V: Spirits of The Corn and of The Wild Vol II., 271, 282, 288, 292, 296, 298. See also Mannhard.

("Whirls"). Meteorologically inclined researchers, such as Bob Skinner and David Reynolds, have instead dealt with accounts of fairy encounters (Skinner, "Seventeenth") and anomalous winds (Reynolds, "Possibility") that may indicate that the atmospheric vortex which is supposed to cause the crop circles has been observed and then interpreted according to traditional beliefs. ³⁶

The lack of narrative folklore about crop circles has caused any explanations which are predicated on any kind of causative agent that must have always existed (such as Meaden's theory) a large degree of difficulty. Randles and Fuller attempt to deal with this by noting that there may be a series of linked agents creating the circles and that climactic variation may lead to waves of circle occurrences. Perhaps, they believe, circles may have been more common a long time ago than they are now.⁵⁷ As with Ralph Noyes they are of the view that the seeming clustering of circle sights in Wessex is neither coincidence, nor statistical anomaly due to the density of researchers looking there. Noyes, in the introduction to Enigma asks:

Was there once another cra, long ago, when patterns were stamped into crop fields throughout the inhabited world by unknown forces? Did they inspire such reverence and awe that they came to be commemorated in the construction of stone circles, the forms of temples and burian places, the creation of rayths and legends, the designs on the mosaic floors of sacred buildings, the formation of Buddhist mandalas. And if so, why did those forces cease to operate until very recently? (26)

⁵⁶ Mason and Ferguson deals with these issues at greater length.

⁵⁷Randles and Fuller, "Circles Update 1990", Mystery Solved passim. This is also the major thesis of Terence Meaden's new book, Goddess of the Stones.

The argument is an old one, that there was some experiential basis behind many of the forms and contents of religious belief and its embodiment in the constructions of the worshippers. It is this which Randles and Fuller note when they point out the association of circle sights with exotically named places such as The Devil's Punchbowl at Cheesefoot. It's also this which motivates researchers to pay attention to the ancient stone monuments of Salisbury Plain and its tumuli-haunted landscape. Their explanations may differ but those so heavily involved in attempting to understand what is stamping its mark all over the country, and particularly Wessex, agree that there is something afoot that challenges commonly accepted scientific notions. Even Meaden, with his revolutionary plasma vortex and carefully nurtured scientific detachment is drawn by his fascination for all that he has seen and experienced to speculate. He wonders if perhaps he has something that could provide the basis for such widespread mysteries as the appearances of the Virgin Mary at Fatima, the burning bush that appeared to Moses, and possibly even the star over Bethlehem. He concludes his article in Engma with the the observation:

Although this is said to be an enlightened scientific age, the cultural consequences even now can be important for some, perhaps many, people: especially those who seek solace in beliefs that are beyond science, beyond our norms, beyond reality, 1981

Summary

This chapter has attempted to deal with the two main aspects of the phenomenon. I have attempted to give a detailed and comprehensive account of the features that mark genuine circles. Of course it could be the case that such circles are the mark of professional rather than amateur hoazers, nevertheless there is still a viable differentiation to be made. I have also tried to give a factual account of the way in which information about the phenomenon has evolved with time and new research techniques. Above all, I have concentrated on the researchers and the circles for it is their symbiotic relationship which has helped to generate the discourse about the crop circles phenomenon. Finally, I have presented some of the fruits of the folk-lore research of the researchers, because this has had a huge impact on their perception of the phenomenon and their explanations for it. As such, this chapter examined no one explanation in depth but merely presented such information as is necessary to maintain some clarity in a confusing issue. Further chapters take up the story of the impact of the circles on our society.

Chapter 2

Belief, Explanation and Crop Circles

Introduction

This chapter provides a theoretical overview for this thesis. Its main function is to elucidate the relationship between explanation and belief. To do this it will be necessary to undertake several tasks. My approach needs to be placed within the context of previous folkloristic studies in belief. In this way the various antecedents to my work can be isolated, allowing me to both demonstrate the continuity between this thesis and other works, and to illustrate the points of departure. Having done this, I can then justify my use of the crop circle phenomenon as a valid field of study. The chapter is

closed with an explication of my fieldwork methodology.

2.1 Folk Belief Scholarship

This is not a literature survey as such because, quite simply, the field of bedief scholarship is not amenable to such a survey; studies in bedief form crucial parts of folkloristics, anthropology, sociology, philosophy, psychology; and cognitive studies amongst others. The act of believing and expressing one's beliefs is universal in the human experience and attempting to categorize bedief, as I have done above, merely illustrates a western, academic worldview. To attempt to review previous studies in belief would be the work of a lifetime; indeed one can see scholarly compartmentalization as a means of allowing academics to make a priori judgements about information that we do not have to read. Therefore what I attempt to do here is to contextualize this thesis in terms of a certain research topic in a subset of bedief studies: supernatural folk belief.¹

It is possibly easiest to understand what I mean by "folk belief" by considering what appear to be the various denotations of the term. Firstly one

[&]quot;This is not an ideal term and perhaps "anomalous folk helief" would be better. Cann-berg 30th "Century Interioury defines supernatural as "above or beyond nature: not according to the course of nature: miraculous: spiritual" (1983 ed.), thus demonstrating that the term is defined according to a presumption about what is natural. Unfortunately there is no ideal analytical term and in this thesis it will be useful to use "supernatural" as that which is not accepted within Western scientific orthodoxy as a natural object, event or process. Such a relativistic definition is slippery at best but it does provide a useful schutchauf for the current surrosse.

should consider 'superstitions': activities such as throwing salt over one's shoulder to avert bad luck, or savings such as "Red sky at night, shepherd's delight" as a form of weather forecasting. Such items, presumably, can be classified as beliefs held by 'the folk'. For instance Alan Dundes treats su perstitions as comprising a sub-set of folk belief that is formed according to a particular morphology ("Brown"). Unfortunately, such a definition makes an a priori assumption that there is a 'folk', as opposed to 'non-folk', and that the 'non-folk' do not hold such beliefs. This may seem a patently untenable position but huge compendia of such 'superstitions' have been compiled? and these tend not to include such beliefs as "low pressure systems often cause rain", or "oat bran reduces the risk of developing cancer". One could attempt to define a "superstition" as an untrue belief, if not for the fact that there do appear to be an innumerable host of such items that have never been classed as superstitions -- the oat bran example above is one such case - and, anyway, how are we to know whether throwing salt over one's shoulder is or is not effective? There have been superstitions that appear to be 'proven' true3. It seems that we are left with the untenable position that superstitions are beliefs held by 'the folk'. As Wayland Hand observes: In no field is the situation perhaps more vexed than in the realm of

superstitions, since aberrations of the human mind involve primi
²For example, Hand, Frank C. Brown Collection of Northern Carolina Folklore Vols.
VI-VII, Cassetta, Popular Beliefs and Superstitions; Hyatt, Hoodoo, Conjuration; Handolph, Cask Superstitions.

³For example, Hufford illustrates how orthodox medicine "discovers the truth behind" folk cures ("Contemporary").

itive peoples as well as the members of civilized societies, and are to be encountered in the byways of religion no less than in the misapplications of learning and the perversions of science. (Introduction xix)

Going beyond superstitions one may also consider the beliefs about "supernatural" phenomena, such as ghosts, fairies and flying saucers, to be an aspect of folk belief. So, belief in supernatural phenomena and seem in contrast with the belief in the existence of natural phenomena, such as electricity and gravity. Similarly one can view 'folk' sciences, such as astrology or home-pathic medicine, as folk beliefs in contrast with 'true' sciences, such as Einsteinian physics.

Also one should consider the dissemination of belief complexes, such as "contemporary legends" and rumours. For example, the accounts of Elvis Presley sightings can be described in terms of folk belief because they are circulated through non-official channels: tabloid newspapers, various small groups of believers, personal experiences and so on. Such unofficial knowledge can be opposed to, for example, various accounts of the existence of a Satanic subculture that is held to be responsible for a multitude of horen-

[&]quot;The concept of folk and non-folk channels of communication is central to much of the work done by Paul Smith: see for example, "Communicating Culture". It is also the premise on which Digh and Váznonyi base their concept of the "Multi-Conduit May possibles" as expressed in their papers "Multi-Conduit" and "Legend and Belief". A similar view, albeit expressed in more traditional terms, appears to be held by Peter Opie, who says in "The Collection of Folkion in England," for example, "Folkion, as I understand it, consists of all the knowledge possed on from one person to another which is not knowledge generally accepted or 'Whichilly' recognised,' Jazanel of the Society of Arts 101 (1852).

dous crimes, which are not generally termed folk beliefs precisely because they are disseminated through official channels, such as newscasts, lectures by social workers and published documents.⁸

From all this it can be seen that "folk belief" is an evaluative term, that functions to isolate a certain worldview and set of beliefs. These beliefs are then held to be in some way untrue and to be believed in only by some homogeneous lump of people, known as the folk, who have a propensity for believing in untrue things. I believe it is precisely this characterization of folk belief, and particularly supernatural folk belief, that has been responsible for the lack of progress in this field. Consequently it is my intention to try to chart the evolution of this view throughout the scholarship in folk belief.

Of course there is much to be said on folk belief in the areas of unorthodox medicine and folk religion as well as the above subjects. This thesis, however, is not the place to deal with such issues. Both topics have gone their own way and have been subject to differing types of analysis. Consequently, I

For an example of this see Gillian Bennett's survey of newspaper clippings about Satanic abuse stories in Britain in the 1990s, "Sex and Caminhalian in the Service of Satan", Dear Mr. Thoma 20 (1991): 36-44. Michael Goss deals with the same issue in "The Lessons of Folkore", Megonia 38 (1991): 10-14. That is not to asy that Satanic abuse stories are not a part of folk belief but that because of the identities and social roles of those who hold them and the methods by which they are conveyed, they powers a legitimacy that is not found in other subjects of folk belief, such as "Elvis is alive" runnours. As the external examiner has pointed out this model cause problems because it is an ethnic rather than analytic category, it could be argued that this leads to a definition of folkture as being that which folkwists as jut is, folkforists being the folk group that a former as being that which folkwists as jut is, folkforists being the folk group that is produced to the state of the second to the state of the second to the seco

⁶This is of course something of an artificial distinction because the fields do overlap.

plan to restrict my focus, largely, to issues in supernatural folk belief in an attempt to trace certain attitudes and their influence. Therefore, I do not intend to review every book and article ever written on the subject; rather I wish to trace a certain movement in the scholarship before reviewing those works which support my contentions and from which I owe the intellectual heritage for my theoretical stance.

2.1.1 A brief history of belief studies

The precursors to modern studies in supernatural belief materials appear to coalesce around two main groups of scholars: the natural historians and the natural philosophers. The historians were interested in the vulgar superstitions, customs and ceremonies of the common folk. Although their motivations for doing this varied widely their crucial focus was on the beliefs of uneducated peasants. The natural philosophers, on the other hand, tended to be interested in the objective reality of events. So, for example, Robert Plot's work on unusual, atmospheric phenomena was an attempt at understanding, or at least cataloguing, them. Plot's work also demonstrates the ways in which the two schools overlapped, for his theories were embedded

For recent works dealing with some of these issues see, for folk religion, Goldstein, "Sharing In The One"; for folk medicine, Hufford, "Contemporary Folk Medicine".

See for example Brand's Popular Antiquities and Hazlitt's revision of it.

⁸For an account of the history of folklore collecting in Britain see, Richard M. Dorson, The British Filklorists: A History.

in a great deal of regional ethnography and published as natural histories.9

Allied to these we can see the influence of the clergy and church ministers who collected pagan superstitions from their flock. Their interest in doing so was varied. For example, Henry Bourne, a minister in Newcastle, was concerned with invalidating pagan superstitions in order to further the acceptance of Christianity, and stated in the preface to his book:

I would not be thought a reviver of old rites and ceremonies to the burdening of the people, nor am I an abolisher of innocent customs, which are their pleasures and recreations: I aim at nothing but a regulation of those which are in being amongst them, which they themselves are far from thinking burdensome, and abolishing such only as are sinful and wicked. (x)

Others, such as Robert Kirk, took another path and attempted to prove the existence of God by proving the existence of the supernatural.¹⁰ Both approaches can be seen to be ideologically motivated.

It can be seen then that even at this early stage there were two main attitudes towards folk belief materials. On one hand there were collectors

⁹The type of ethnography that Plot undertook is vastly dissimilar to that of today. Essentially, he would tour a county by visiting and staying with members of the landed gentry for whom he could muster letters of introduction. In repayment for food and board he would usually make drawings of the house and grounds and attempt to answer various questions about the family for. Whith based at a house he would then tour the surroundings looking for accounts of strange happenings as well as making a geographical survey of the land. See Emery for further details.

¹⁰Robert Kirk spent his life roaming the Highlands of Scotland in a Herculian attempt to elucidate the social structure of the fairy kingdom. He eventually paid for his research with his life although, according to local belief, he did not die but was abducted by the very fairies he was studying. See Briggs, The Vanishing People, 112–113, for an account of this.

who tried to use their collections for some didactic reason, like Bourne and Kirk. On the other hand were the likes of John Aubrey, who collected heliefs out of enthusiastic interest, and Robert Plot, who believed his work to have some scientific utility.

This early dichotomy, innocuous though it may seem, when allied to the birth of scientific rationalism had the effect of hampering folk belief studies for many centuries, retarding it in comparison with folkloristic research generally. As recently as 1976 Wayland Hand was able to write:

Although folk beliefs and superstitions constitute one of the main genres of folklore, interest in this field over the past century and a half has lagged well behind the scholarly concern with other fields. ("Folk Belief", 209)

The reasons for this retardation are manifold, but I believe the prime influence was the emergence of science as the dominant paradigm in academic research coupled with the vast changes in social structure in the eighteenth century with the advent of the industrial revolution. This is not the place to discuss and illustrate the complex and intricate changes that took place, but folklorists and their predecessors are a product of the culture from which they hail, and I believe that certain factors from this period engendered the massive upsurge of interest in popular antiquities, later to be redefined as

¹¹ The classic text dealing with this period is undoubtedly E. P. Thompson's The Making of The English Working Class. My principle intellectual debt in attempting to understand the shift in social structures belongs to Ruth Richardson, Death, Dissection And The

The principle argument is that at this time there was a fundamental change in social structure from a "vertical", feudal system to a "horizontal". class-based system (Thompson; Hughes). This gave a certain class of people a theoretical basis with which to isolate the ill-educated peasantry as a single. homogeneous mass. Hughes illustrates how this gave rise to the portraval of a "criminal class" which existed solely to prey on the newly emerged "middle class", essentially a form of inter-class blason populaire that eventually motivated the punishment of transportation to Australia (25-27, 163-174). Similarly, Richardson discusses the changes which replaced the paternalistic almshouses with deterrent workhouses and the way in which poverty became stigmatized as a crime (147-151). This portrayal of a whole class of society as a brutal, vicious, homogeneous mass of ignorance had a predictable effect on those who collected its 'vulgar mistakes'. Folk belief became virtually synonymous with ignorance. The same Wayland Hand who bemoaned the lack of interest in folk belief materials tellingly demonstrates this stigmatization of folk belief by academics, stating that:

... superstition has to do with beliefs and practices so patently false as to be at once personally injurious, or even socially harmful. (Introduction xxi)

And, later:

In a former day many [superstitions] were certainly nothing more

Destitute; Robert Hughes, The Fatal Shore; 19-47, 163-174; and Keith Thomas, Religion and The Decline of Magic 1-21.

than the childish soliloquies of old crones as they drove their geese across the village common. (xxii)

The effect of the emergence of science was possibly even more dramatic. Whereas the field of natural philosophy, the predecessor of modern science, regarded its inquiry as hermetic.¹² that is to say the cosmos was regarded as a closed system, the new scientific methodology encouraged a mechanistic reductionism. Suddenly all the charming whimsies of fairies, stones falling from the sky and the mystical powers of numbers became marginalized. It was not an overnight revolution — for example Isaac Newton continued to experiment with alchemy (Thomas, 644) — but the effect was a continual erosion of the academic interest in non-scientific fields of interest, and researchers who previously took such fields as central, such as the popular antiquarians, found that they had to distance themselves intellectually from their subject.¹² It was this distancing that lead to the rise of the debunking antiquarians, such as John Brand and Francis Grose, the latter cynically commenting that:

Almost every ancient manor-house was haunted by at least one of its former masters or mistresses, where besides diverse other noises, that of telling money was often heard: and as for the churchyards, the number of ghosts that walked there, according

¹²The Ozford English Dictionary 2nd ed. defines "hermetic" as "relating to or dealing with occult science, esp. alchemy; magical; alchemical" along with its secondary meaning of "airtight, sealed". In this respect we can see the way current science has denigrated the former definition of the field.

¹³I owe thanks to Gillian Bennett for suggesting this point to me.

to the village computation, almost equalled the living parishoners.
(3)

In such a climate it was almost inevitable that the study of systems of folk belief became intellectually taboo.

The effect of these two influences then has been firstly to stigmatize 'the folk' and secondly to stigmatize 'their' beliefs. This is a problem for folkloristic research in general, but the doubly stigmatized nature of folk belief has left a difficult residue of prejudice. Whereas genres of traditional expressive culture, such as marchen and ballads, could be collected for their aesthetic content no similar collection could be done for beliefs except in the compilation of highly artificial, supernatural legends of fairies, ghosts and other 'good' stories.\footnote{1} Thus beliefs were not studied in their own right. It seemed that they had nothing to offer the scientist.

It is ironic then that it was a major extension of the scientific paradigm, Darwin's theory of evolution, that revitalized folkloristic theory and suddenly bought new possibilities for the study of folk beliefs. Suddenly, by analogy with the process of natural selection, it became possible for anthropologists and, in following their lead, folklorists to see culture and societies as entities arrayed in a type of pyramid. Naturally, western, technological society was seen to be at the apex with various others placed beneath them. Furthermore, the studies of faraway natives by European anthropol-

¹⁴See for example, Dégh and Vázsonyi, "Legend and Belief" 286-287.

ogists elicited data about their practices which seemed surprisingly similar to many of the idiosyncratic vulgar errors of the masses. It became possible to argue that folk beliefs consisted of the earlier, more primitive beliefs that educated, western society had advanced beyond. So when Edward Clodd, a respected folklorist and one time president of the Folkhore Society, states in 1893, "we have but to scratch the rustic to find the barbarian undermeath." are is using "barbarian" to a refer to a level of culture that is seen as lower on the evolutionary scale than educated, western society of which he was a member. 16

The influence of this theory of cultural evolution on folkloristic thought can not be overstated. Gillian Bennett describes it as being the origin of the "English Myth" in folklore, wherein rural life became romanticized as the remnants of a "golden past" ("Folklore"). Synchronically the theory was held to imply that folklore, and the folk, existed out in the country amongst simple, uneducated people. So Cecil Sharp was able to write of the decline in folk song that it:

In days gone by, played an important part in the social life of the English village. That life is now waning, and with it are passing away old traditions and old customs. It is, happily, still possible, here and there, and in out-of-the way nooks and corners, to come

¹⁸See, for example, Charles Francis Potter's definition of 'folklore' in Funk and Wagnall's Standard Dictionary of Folklore Hydrology and Logard voi. 1 (NY: Funk and Wagnall, 1949), in which he states, 'Folklore is the survival within a people's later stages of culture of the beliefs, stories, customs, rise and other techniques of adjustment to the world and the supernatural, which were used in previous stages" (401).
**Odd. in Richardson 3.

upon peasant men and women old enough to remember the village life of sixty, seventy or eighty years ago; and they will sing to you the songs and explain to you the dances that, in their young days, and on summer evenings, were danced on village greens.

Of course, folklorists, such as the "Great Team", 17 were citified, educated gentlemen, a world away from the simple, uneducated peasants they studied. This emotional and intellectual distancing of the theorists from their informants seems to have allowed the decay of folklore studies in the UK, with folk belief being particularly hard hit. As Gillian Bennett claims:

The collectors laboured in the field; the theorists laboured in the library. The result was that theory was effectively insulated from any outside influence, and became a fossil itself. In turn, collecting also became fossilized: denied the chance to interpret their data, and prevented by both prejudice and theory from asking their informants what their folklore meant to them, collectors could not have found much reward or interest in their efforts. ("Polklore")

If the peasantry are shown to hold some similar beliefs to those of primitive societies then evolutionary theory has a mechanism to explain it: survivals. As a culture evolves remnants of the old belief systems w.s. persist in out-of-the-way places, however, lacking the systemic and cultural integration that they used to possess, these remnants should slowly wither and die. So, Thomas Keightley, writing in 1889, is able to assert, of fairies, that:

¹⁷Dorson's term for the elite scholars of the Folklore Society at the close of the 19th century.

All these beings once formed parts of ancient and exploded systems of religion, and that it is chiefly in the traditions of the peasantry that their memorial has been preserved. (13)

This concept motivated the belief that folkloristic research should be centered around the collection of survivals and generated most of the huge, latenineteenth century collections. In this context, Frazer's monumental work The Golden Bough, which attempted to prove the existence of ancient fertility rites at the base of all manner of customs and beliefs from across the world, found itself lovingly adopted by folklorists. The dominance of cultural evolutionism was such that in 1896, Edward Clodd was able to assert in his presidential address to the Folklore Society that Christian rites and customs had their origins in pagan practices. ¹⁸

Although brought back within the field of scholarly study through the interest in cultural evolution, the study of folk beliefs, remained stigmatized. The cause of this appears to be the concern of folklorists that their discipline should be seen as a 'scientific' subject. With the dead-end of cultural evolutionism preventing folklore from gaining respectability as an academic discipline in the UK, and to a lesser extent in America and Europe, the discipline found itself striving for scientific legitimacy. For example, the otherwise fearless and irascible G. L. Gomme, then Honorary Secretary of the Folklore Society and full-time member of the "Great Team", opened his book

¹⁸Edward Clodd, Presidential Address, Folklore 7 (1896): 35-60. Qtd. in Bennett, Traditions of Belief, 96. It should, however, be noted that Clodd's statement outraged Victorian society, leading to wholescale resignations from the Folklore Society.

Folk-Lore Relics with the following meek and apologetic words:

I do not offer this book as a scientific exposition of Folk-lore, though I hope the scientist will find nothing in it to quarrel with.

Consequently those genres, such as folk belief, which appeared to deal with non- or anti-scientific beliefs had to be approached from a position of disbelief. Gillian Bennett describes this stigmatization as a series of vicious circles that contributed to the marginalization of supernatural folk belief, saying that "firstly, no one will tackle the subject because it is disreputable, and it remains disreputable because no one will tackle it. Secondly, because no one does any research into present-day supernatural beliefs" the only collections available tend to be stuck in a "time warp" which has the effect of inhibiting the publication of current beliefs. "Thirdly, because no one will talk about their experiences of the supernatural there is no evidence for it, and because there is no evidence for it no one will talk about their experiences of it." (Traditions 13).

One effect of this has been to dichotomize the studies of supernatural traditions in the current century. Those that were undertaken from a sceptical viewpoint, such as the sixth and seventh volumes of the F. C. Brown Collection of North Carolina Folklore, were labelled as surveys of folk beliefs. Those that were undertaken from a sympathetic viewpoint, such as Lang's Cock-Lane and Common Sense or Evans-Wentz's The Fairy Faith in Celtic Countries, were consigned to the trash-bin of parapsychology and occultism, exiled from social-scientific orthodoxv. It would seem that it was the atti-

tude of the researchers and their scholarly colleagues to their materials that defined whether or not the study was folkloristic.

In addition to their marginalization as a topic within folklore research, supernatural belief studies also suffered from the fact that they seemed to fit neither of the two ideological perspectives that often motivate folkloristics. ¹⁰ If one wishes to use research for ideological purposes as, for example, Wilson states the Finnish historic-geographic school did, there is something embarrassing about cataloguing the irrational beliefs of the peasantry. On the other hand, there is very little that is aesthetic about a dite, although interesting legends and colourful cales of the supernatural do provide a pleasing contrast with overtly fictional nerratives. ²⁰ Inevitably the amount of scholarship devoted to folk belief was minimal.

Although work did continue in folk belief it tended to lack any overarching theoretical structure. In the 1920s and 30s, Von Sydow extended his pioneering work in genre analysis to belief materials in attempt to categorize the different types of expressions in which some element of belief appeared to motivate the narrative (106-126, 166-188). This was done, however, in order to differentiate between those genres which provided useful source ma-

¹⁹For a discussion of the influence of these aesthetic and ideological perspectives in folklore research a good source is: Rosemary Zumwalt, American Folklore Scholarship: A Dialogue of Dissent.

³⁰This ideological/assthetic dichotomy can be seen even in the earliest works mentioned above. Brand and Kirk were both motivated by ideological concerns where as John Aubrey's collections can be seen as motivated by an aesthetic impulse. Plot, although having a few theories and a belief in the efficacy of the scientific method, seems at heart to have been a collector of anomalous marginalist.

terials for folklorists and those which did not. As Honko, elaborating on Von Sydow's work, makes clear:

From the point of view of folk belief study, the analysis of traditional genres is above all an auxiliary means of source criticism. ("Memorates" 7)

The elucidation of genre does provide a useful first step in analysing folk belief but it says nothing about the subject itself. The main movements in folklore, such as the Pinnish historic-geographic school of the first half of the century, never generated methodologies to deal with folk belief. Instead, disciplines, such as psychology, seemed to take Hobbes's assertion that belief in the supernatural belief arises from the inability of 'primitives' to distinguish waking from sleeping²¹ as definitive. For example, Freudians, such as Ernst Jones, interpreted supernatural nocturnal assault experiences as the results of psychic stress²² and C. G. Jung saw UFOs as projections of the collective unconscious.²³ Other disciplines, such as anthropology, concentrated on the functionality of folk belief.²⁴ During all this folklorists remained strangely quiescent, although a traditional-psychological school of folk belief scholars.

²¹Paraphrased from Hobbes' famous description of superstition in Leviathan.

²²Jones, On The Nightmare. The classic analysis and rebuttal of Freudian theory, as applied to the Nightmare tradition, comes in Hufford's Terror That Comes In The Night en. pp. 115-170.

²³ Jung's formulation is somewhat more ambiguous. For example he saw UFOs as psychoids, a form of collaboration between reality and human imagination (Stillings). This analysis is crucial to the Cyberbiological hypothesis concerning anomalous happenings (Stillings, Rojecwicz "Signals").

²⁴Peel summarizes the role of the expressive/instrumental dichotomy in social anthropological belief scholarship: "Understanding Alien Belief Systems", 73-76.

ship, inspired by the works of Marti Haavio, appears to have started in Finland in the late thirties. Even the structuralist revolution of the 1960s seemed
to sideline belief materials, although there were some exceptions. Dundes attempted to apply his structural model of narrative construction to patterns
of "superstitions", which he viewed as a particular subset of dites, claiming that, "superstitions are traditional expressions of one or more conditions
and one or more results with some of the conditions signs and other causes,"
("Brown" 28). Mullen's work on beliefs among Texan, coastal fishermen postulated a similar structural model. Stating, however, as Mullen does, that the
superstition, "If you bring a black suitcase on board you will have bad luck",
fits the model:

Cause condition (black suitcase) implies Result (bad luck)

does not say much that is useful about the belief ("Relationship" 407).

Lauri Honko made a more ambitious attempt to provide a morlel, which would account for the generation of personal experience narratives in terms of experience and tradition that combined the Finnish traditional-psychological model with a structuralist approach ("Memorates"). If gives the example of a barn warmer who falls asleep on the job only to be awoken by a spirit just in time to prevent the fire from going out. Basically, he asserts that the individual has violated a norm (sleeping on the job) and expects to suffer the appropriate sanction (a visit from an angry spirit), and when some unusual noise awakens him he is in a state of stress. Waking, the combination of his

psychophysical condition, the dark environment, and his cultural expectations causes him to misperceive something as a figure staring at him. Once the individual becomes fully awake there is no longer any evidence for the figure ("it has disappeared"), so he draws on his worldview to provide him with an explanation (16-17). It is an interesting analysis, not least because it emphasizes the individual's perceptions of supernatural encounters, which provides an account for the maintenance of traditions of belief. This theory allows for a new approach to folk belief as a process with traditions of belief playing a crucial role, rather than seeing beliefs as random survivals from exploded systems, and as such it offered room for research. Unfortunately Honko's model relies crucially on the a priori assumption that anomalous experiences are caused by the misperception of ordinary objects, and it still has to be seen as an attempt to 'explain away' folk belief.

Sadly, this is the state in which belief studies have languished until relatively recently.

Folk belief — a new generation of scholars

The revitalization of interest in belief materials is due to many coincident factors: the emergence of contextualism in the 1960s and the stress on studying folkloric items within the ethnographic context; the rise in interest in contemporary legends and the field's attempt at defining the genre, usually in terms of belief; the growing acceptance of certain areas of parapsychological research within academia; the growth of reflexivity within a whole host of the social sciences which is prompting researchers to question the impact of their beliefs; the influence of paradigm theory of revolutionary rather than evolutionary change within systems of knowledge, and the pioneering work of folklorists such as David Hufford and Gillian Bennett who have demonstrated the utility of fieldwork methodologies that attempt to focus on the process of belief rather than being distracted by ontological status of the items of belief.³⁵ The combination of these factors has led, finally, to a corpus of tools and materials that allow for the systematic analysis of beliefs and their readitional context.

³²There is of course the issue of when the study of epistemology leads to the consideration of ontology. Past works have assumed the non-ontological nature of the claims to knowledge in an a priori manner, inevitably prejudicing the study of epistemology. The act of divorting the two issues claiffies the field, although obviously there does come a time when any stohast wishes to examine the ontological absit, and there is no better guide in this subject than our informants. This thesis leaves the ontological issues of the subject to one side and is firmly a study of the crop circle phenomenon.

2.2 Current Trends in Belief Studies

There appear to be four main strands in current belief studies that have contributed towards the resurgence of interest in folk belief. They can be summarized as:

- 1. The sensitivity to traditions of disbelief as well as traditions of belief.
- The deconstruction of belief narratives into features, allowing principled comparison of events from seemingly unconnected belief traditions.
- The use of the experiential source hypothesis in opposition to the cultural source hypothesis, which is to say that experience can be primary in a tradition.
- The elucidation of patterns of belief that focuses on the coherent nature of belief systems and the function of these systems within the social context.

The last of these items is the most difficult to deal with because it seems to have resulted from the combination of the other three principles. Consequently very few folklorists have focussed on the rational nature of folk belief or attempted to foreground the notion of systems.⁵⁶ The main thrust of this

³⁶ Although the influence of systems theory on folk belief studies has been much talked about little sens yet to have been published. Notable exceptions are Hufford, "Contemporary Felix Medicine" 46-55; Goldstein, "Sharing In The One" 26-28. The prime text, thus far, appears to have been written by two sociologists, Borhek and Curtis, and attemuts an empirically verifiable tyrology of belief systems.

thesis is to do precisely that and I deal with it in terms of explanation -the internal, reasoned aspects of belief systems. At this point, it is useful to
sketch some of the influence of the other three strands.

2.2.1 Traditions of dishelief

William S. Burroughs writes that, "between believers and non-believers, there is only the razor's edge." This is a view that is gaining a surprising amount of currency amongst researchers: as Hulford argues,

... atheists are believers as much as the faithful are. The religionist is as much a skeptic of the materialist framework as the materialist is a skeptic of the supernatural. ("Traditions" 20)

The plea is for the investigator to attempt to walk the razor's edge whilst studying such beliefs, to nurture what Hufford describes as a "radical objectivity", for in so doing,

... we immediately find two parallel sets of traditions where we had thought there was only one: traditions of belief on the one hand and "traditions" of disbelief on the other. (20)

To state that there is a tradition of disbelief is merely to argue that with any set of beliefs there will be some people who do not believe in them and these people will fall into a tradition of disbelief. That is to say that their disbeliefs are likely to be founded in traditional, cultural ideas. Thus, if one identifies a tradition of belief in, for example, the existence of fairies then one will immediately be able to identify people who do not believe in the existence of fairies for certain reasons and that these reasons are formed in a folkloric manner. This should not be taken as stating that there is some homogeneous worldview that denies the existence of any and all supernatural phenomena and is the tradition of disbelief; rather given any one item or event there will be "believers" and "disbelievers". A "tradition of disbelief" does not necessarily correspond exactly to a rationalist, materialist worldview, 27 rather it expresses a certain reasoning process. It is perfectly possible, and indeed quite common, to find disbeliefs that are irrational.

Gillian Bennett, in her analysis of the beliefs of elderly women about various supernatural issues, demonstrates that the fulcrum between belief and disbelief is not necessarily some concept of objective truth. She discovers that whereas the majority of women accept the possibility of involuntary, intuitive experiences (seeing ghosts, precognitive dreams), a similar majority do not accept voluntary, intellectual phenomena (horoscopes, seances). Bennett attributes this to a certain reasoning process which allows the ontological status of events that appear to correspond in type with the women's gender-related self-identity. Thus these women, who have been socialized into the role of passive, emotional beings — as opposed to the male role of active intellectualism — tend to believe in things that display the same characteristics (Traditions 27-31).

²⁷ Jacqueline Simpson appears to make this assumption in her article, "Belief and Disbelief", in which she appears to equate rational scepticism with the process of disbelief. The debate is carried on in Goldstein, "Belief and Disbelief"; and Hufford, "Rational Scenticism".

The characterization of the two traditions of belief (belief and disbelief) allows a radical redefinition of the subject of folk belief, for if we, as Hufford suggests, "make the the element of likelihood or objective accuracy a descriptive rather than a definitive one" ("Humanoids" 235) them we both broaden and delimit the field. For example, during the American Moon landings programme a common disbelief, which appeared to gain quite a degree of status, emerged that stated, basically, that the landings never happened and were faked. This modern disbelief falls into exactly the same categories as those about fairies and ghosts. 28

Equally importantly, such a characterization forces the folklorist to reevaluate their investigation and presentation of folk beliefs. As Diane Goldstein remarks:

Though individual scholars may hold unshakable ideas about the ontological status and nature of supernatural phenomena, our focus as folklorists is on the belief and not, at least initially, on the obenomenon itself. "Belief" 65)

By doing this it is possible to achieve what the British sociologist, John Peel called for in 1969:

...in the study of alien belief systems we must aim at a more difficult goal, a temporary suspension of the cognitive assumptions of our own society. (82)

A classic example of the confusion that occurs when a folklorist fails to suspend his own disbeliefs can be seen in an article by Wayland Hand,

²⁸See for example, Dégh and Vázsonyi, "Legend and Belief" 283.

the pre-eminent American folk belief scholar of the post Second World-War period. Writing on "the fiery and luminous creatures of lower mythology" he struggles to devise a phenomenology. Rejecting out of hand his informants' explanations of the lights as being supernatural in origin, because "the whole field of folklore rests more on the products of human fantasy... than on the cold, hard logic demanded by science" (232), he turns to those who "casting aside their predilection for folklore, pure and undiluted, have tried to account for what they have heard as old-wives tales," (232). From these he gains the observation that maybe glow-worms and fireflies are responsible, which he rejects because "These creatures seem too commonplace in natural history to be the object of extensive mythologizing," (233). Eventually he is driven to considering the sparks of electricity caused when a fox's tail touches the ground, the luminosity caused by rotting wood and analogies to St. Elmo's fire. Essentially, he confuses phenomenonology with interpretation29 and most tellingly only takes into account those explanations which hail from various traditions of disbelief.

Through recognizing disbeliefs for what they are, just another form of belief, and being aware of our own beliefs and biases whilst studying those of

²⁹This is perhaps a little harsh. Most philosophical schools go far beyond the dictionary definition of "phenomenonology" and into interpretation. For example A. R. Lacey's Dictionary of Philosophy defines "phenomenonology" as:

Literally, the description or study of appearances.... the emphasis shifted away from the mere description of appearance towards a description of the objects of experience, which [Husserl] called, phenomena. (158)

and it is likely that this is what Hand was taking as his point of departure.

others, we are able avoid some of the pitfalls into which many have previously slipped. Furthermore this also leads to a more subtle characterization of the beliefs of individuals. As Rojcewicz remarks it seems that individuals are able to hold contradictory beliefs or interpretations of events and select from amongst them according to context.³⁰ He notes that previous studies have tended to overlook this point, leading to collections of beliefs that bear a homogeneity that may be more the product of the researcher's own beliefs than those of their informants ("Round Two").³¹ This acknowledgement of the existence of supraindividual traditions of belief and disbelief and our attempt to escape from our own biases wherever possible helps to revitalise the whole field of inquiry, as Hufford, again, points out.

... there is a limit to how many times one can explain the naive irrationalism of one's informants, whilst simultaneously alleging their dignity and native intelligence, and espouse a universal relativism that is at direct odds with with one's own implicit epistemology, before cognitive dissonance and boredom combine to send one on to more pleasant occupations. (*Reason' 184)

³⁰Rojcewicz makes this point in "Round Two", drawing on Kenneth Goldstein's article on the difficulties in collecting folk beliefs. The issue is contentious for Rojcewicz directly argues against a reductionist reasoning process and draws on epistemological logics such as Dan Sperba's in contrast to the model of cognitive dissonance proposed by Festinger, which is discoved later.

³¹This homogeneity is sometimes evident throughout this thesis and is something of a side-effect of my collecting methodology. This work is deliberately hissed toward selucidating systems of thought and traditions of explanation and I have therefore glossed over some of the inherent ambiguity of the subject. Readers should be aware that the beliefs expressed throughout this thesis by my informants may well have been realically different if expressed to anothe person or even if they had been expressed to me at different time.

2.2.2 Phenomenonology and features

As a corollary to his elucidation of traditions of belief and disbelief Hufford found himself compelled to espouse a phenomenonological methodology: one in which the investigator focuses purely on the percipient's account. He describes a phenomenonological interview as one which aims at a:

description of specific subjective experiences with a minimum of interference from postevent interpretation and ambiguous language. (Terror xvi-xvii)

Such an approach sidesteps issues based around the ontological reality of any event by dealing with its descriptive features.

By comparing narratives from several interviews dealing with the same belief tradition, the investigator is in a position to attempt a typology of the descriptive features that are associated with the reported events. So, for example, Itufford is able to isolate four stable, "primary" features that occur in all of the "Old Hag" experiences²² that has studied, as well as many more "secondary" features that are often found in the attacks (Terror 287-270). These features act as signposts, pointing out the issues that have to be addressed by any explanation, without imposing an interpretation of their own.

Hufford did not invent the use of features in belief scholarship, however he was the first to use them in a folkloristic context. Previously it had been a

³²At its most basic these experiences can be defined as nocturnal, supernatural assaults. Generally they are reported as fearful attacks on sleeping individuals who find themselves paralysed and unable to fully wake whilst some presence is in their vicinity.

device used only by advocates for particular traditions of belief. For example, Raymond Moody, in his pioneering work on "Near Death Experiences", drew up a list of features that appeared to be common to the wast majority of experiences, both cross-culturally and in cases where the percipient had not been exposed to the belief tradition. Similarly a close phenomenonological description of anomalous events had long been advocated by ufologists (researchers dealing with the UFO phenomenon) such as Jenny Randles, Peter Warrington, Jacques Vallee and J. Allen Hynek. Most notably, an innovative piece of research by a pair of scientists, Lehr and Schroeder, demonstrated that it was possible to explain mermaid sightings as an optical phenomenon if the data from narratives dealing with such sightings was used to inform the parameters of the phenomenon.

The ramifications of this approach are spreading throughout folk belief studies and into related fields such as ufology. Hufford himself demonstrated similarities between the Newfoundland "Hag" tradition and a whole range of seemingly diverse phenomena, such as vampires, out of body experiences and alien encounters (Terror 171-244). One scholar in particular, Peter Rojcewicz, has taken this methodology and proposed an "Extraordinary Encounter Continuum" hypothesis. This essentially postulates that a set of features can be drawn up which comprises the possible ontology of any encounter with a paranormal entity. Thus any one encounter will select a

³³Hynek, UFOs: A Scientific Investigation; Randles and Warrington, UFOs: A British Viewpoint; Vallee, Passport to Magonia, Invisible College.



Figure 2.1: An example of the use of features in a continuum. The theory works as follows. Imagine that after exhaustive phenomenonological analysis the investigator has found a number of features — here simplified to six: $\{a \ b \ c \ d \ e \ \}$. Within these tatitions one body of encounters always contains $\{c \ d \ e \ \}$ another always contains $\{c \ d \ e \ \}$. Another always contains $\{c \ d \ e \ \}$ and a third contains $\{c \ d \ e \ \}$. The diagram above models the differences and similarities. Of course this is wastly oversimplified.

certain subset of these features. He theorizes that particular belief traditions will be defined by the selection of a particular subset as primary features. Thus it is possible to envisage a continuum of experiences with certain traditions sharing common features. This is further demonstrated in figure 2.1.

As Hufford's book becomes increasingly widely available, having just recently gone into a paperback edition, the implications of his work are beginning to spread. Hilary Evans uses some of his concepts in his work on encounters with paranormal entities (Visions) and Bullard takes a similar stance in his investigation of alien abduction experiences when he produces an eight-point schema for such abductions ("UFO" 153). Increasingly, such work is demonstrating the complex interconnections between various systems of beliefs as well as disbeliefs and, just as importantly, illustrating the traditionality of contemporary beliefs with analogues from the past.44

2.2.3 The experience-based approach

The combination of a phenomenonological methodology and the unearthing of traditions of disbelief, in folklorists³⁸ as well as the folk, led Hulford to propose an alternative model of the interaction between supernatural experiences and traditional belief: "the experiential source hypothesis". The theory basically proposes that:

...some significant proportion of supernatural belief is associated with accurate observations interpreted rationally. (Terror xviii)

Hufford proposes this in opposition to what he calls the "cultural source hypothesis", which maintains that supernatural belief arises from inaccurate observations interpreted according to cultural models.³⁶

The value of experiential source hypothesis is two-fold: it illuminates the cultural source hypothesis, which is too often treated as the a priori basis of investigation; and it allows an investigation to be undertaken from a truly sceptical, rationalist viewpoint, for to say that some portion of a tradition is

³⁴For further examples see, Hufford, "Humanoids and Anomalous Lights"; Meurger and Gagnon, Lake Monster Traditions; Rojcewicz, "The 'Men In Black' Experience"; Vallee, Passport to Magonia.

³⁵ See for example, the discussion above of: Honko, "Memorates and Folk Belief". In his paper Honko makes the a priori assumption that encounters with supernatural entities are always misperceptions of natural benomena.

³⁶ Terror 13-46. See also Donald Ward, "The Little Man Who Wasn't There."

founded upon accurate observation is not to prejudge any ontological basis of the tradition. If one proposes that some part of the belief in the existence of ghosts, for example, is based upon accurately observed and reported experiences that in no way is to state that ghosts have an objective existence as, say, spirits of the dead or as pranksters wearing white sheets.

2.2.4 Walking the razor's edge

The three issues raised above combine to force a reevaluation of the relationship between the folklorist and the folk belief materials we study. Rather than collecting only those beliefs we feel to be somehow objectively untrue and using that as the defining principle, the activity is best summarized as the identification of some emic tradition of belief and the utilization of folk concepts to guide an investigation into its phenomenonology. This methodology allows the collection of raw data that can then be interpreted theoretically. In a very real sense the tradition bearers become our teachers and guides and not the childish old crones that Hand suggests.³⁷

The great benefit of this new approach is that it allows the field of folklore to re-encompass much work that has been exiled from it. Writing in 1987 of supernatural belief traditions, Jacqueline Simpson, a leading British folklorist, said, in a counsel of despair:

Such things can, and should be, investigated, but the method-

A7See quote on page 73 above.

ology involved will have to be that of an appropriate science, not that of folklore per se. It was inevitable that [for example, Andrew] Lang should shift his main activity to the Society of Psychical Research once he began to suspect that paranormal phenomena might have a factual basis. ("Belief" 16)

This need not be the case. Andrew Lang, a leading folklorist in Victorian times gradually found himself becoming a voice in the wilderness, finding himself more intellectually at home in parapsychology, because the folklore establishment refused to grant his interests legitimacy. B Lang's crime was that he argued for the possibility of paranormal experiences. 1 would hope that he would now find himself at home with much of the current thinking, for writing in 1894 he anticipates Hufford's analysis of irrationality within traditions of disbelief (Lang uses the term "common sense") as well as those of belief

In many cases, as we show, the explanations offered by commonsense are inconsistent, inadequate and can only be accepted by aid of a strong bias which influences the reasoner. (xiii)

The current climate is allowing both sceptics and believers the chance to use folkloristic models in their investigation of paranormal phenomena in

³⁸ The most passionate of Lang's advocates, Gillian Bennets, describes him as depressed but determined, and states that he remained in folkince to the bitter ond (Presonal communication). The quote from Jacqueline Simpson above seems to contradict this. The 'truth' of the matter is difficult to determine. The point is that Lang published in both parapsychological and folkiore journals, in the same way that folkiorist such as Peter Rojeewicz and Thomas Bullard currently do. However in Lang's time such activity was considered anti-establishmentarion.

³⁹Gillian Bennett concisely sketches the argument between Andrew Lang and Edward Clodd in Traditions of Belief 96-104; and "The Rhetoric of Tradition."

a way that has not been possible before. My intent is to use some of the machinery described above to attempt to explicate systems of explanation for a phenomenon, the flattened circles of standing cereal crops, that is as objectively real as you or I.

2.3 Crop Circles and Folk Belief

The first portion of this chapter has attempted to do two main things; to sketch the paradigm in which most of the past work about folk belief has taken place and to outline a new approach, most notably employed in the writings of David Hufford and Gillian Bennett, that appears to offer renewed vitality and vigor to the field. I believe that the most significant achievement of this approach has been to shift the focus of belief studies to the process of belief. It is in this light that crop circles make a useful focus in folk belief processes for, unlike so many anomalous phenomena, there is no doubt as to their existence. Crop circles are prima facie evidence that something (or things) is causing them. What then is at stake are the various explanations for the origin of these circles. Consequently this phenomenon has highlighted issues in folk belief, such as the choice and use of evidence, that are often buried under epistemological confusion and taxonomic chaos. Thus it is possible to focus on the various explanations that are being proposed for the nature of the agent that causes the crop circles.

2.3.1 The role of explanation

An explanation is an abstract concept that interprets some class of observed phenomena, whether supranormal, paranormal or otherwise. That is to say, an explanation is to a corpus of observed phenomena in a belief tradition as, for example, the theory of gravity is to the observation that things fall down. This implies that there should be some degree of similarity between explanations of all types, whether folk, scientific, pseudo-scientific, religious or another, because the explanations function similarly. Therefore one would expect such explanations to be subject to similar external forces if not necessarily composed of similar structures. ⁵⁰

The relationship between belief and explanation can perhaps be best illustrated by looking briefly at a couple of other traditions of belief (ghosts and UFOs) in order to illustrate the relationship that holds within them.

Chosts

It is easiest to start with the subject of ghosts first for much of the legwork has already been done by Gillian Bennett in her book Traditions of Belief, Although she never explicitly foregrounds the concept of explanation, she does do two main things: she analyses the acceptability of certain supranormal beliefs to her informants, under the rubrics of traditions of belief and disbelief, and she traces the changes in the characteristic behaviour of ghosts in narratives over time: the classic synchronic and diachronic facets of folkloristic research. I believe that the concept of explanation can be invoked to explicitly unify the two. Synchronically an explanation provides the paradigm which determines the acceptability and membership of an event within a

⁴⁰The concept of 'explanation' has caused much trouble for philosophers. See, for example, Lacey, Dictionary of Philosophy 64-66.

certain belief tradition. Diachronically it allows for change and variation as external, paradigmatic forces exert pressure.

Bennett's analysis of her informants' beliefs about various supranormal phenomena essentially isolate the results of their explanations in much the same way that a doctor can isolates the symptoms of a patient's problem. From these results she deduces that they are more apt to believe in phenomena when the act of doing so does not appear to contradict their social and religious self-identity. It is 1, wisble, however, to generalize this and consider the women's explanations. Bennett says:

The crucial sticking-point is [the women's] attitude towards the status of the dead. Rationalists of the 'once you're dead, you're dead, you're dead' school discount not only belief in spirits but also most forms of divination and precognition; supernaturalists of the 'there are more things in Heaven and Earth, Horatio' school would not only believe that the ghost of Hamlet's father was real enough but also firmly trust ESP. (27)

So if the explanation for ghost (the theory of what exactly a ghost is) is taken to be something along the lines of 'a ghost is the metaphysical remnant of a dead or soon to be dead person', then a dichotomy is formed amongst those who accept the explanation. That is to say that if one believes that ghosts are the spirits of the dead then the ontological status of ghosts is determined precisely by whether or not one accepts the possibility of spirits of the dead. Therefore one can reason along the following lines:

1. Ghosts are the spirits of the dead.

- 2. Spirits of the dead do not, or can not, exist.
- 3. Therefore ghosts do not exist.

This may appear to be belabouring the point but it seems to me to be crucial to the understanding of why it is possible for approximately 20% of the women interviewed by Bennett to disbelieve in ghosts but believe in ESP (27). This, at the very least, calls into question the quote above for it suggests that 'rationalists' may believe in paranormal events. Bennett does not indicate the basis on which these women rest their beliefs but it does seem to suggest that we need a slightly more complex analysis.⁴¹

In addition to this synchronic analysis of contemporary ghost beliefs, Bennett also traces the changing role of the ghost throughout recorded history (149-209). In particular she focuses on the changing social role of the ghost. In this respect she follows Keith Thomas who correlates social changes with changes in the depiction and activities of ghosts (587-606). He states that "Ghosts were no more motiveless than witches; they had an important social role to play," (596). Therefore changes in society, the intellectual climate of the time, perforce changed narratives about ghosts.

The two authors both skirt around the role of explanation to a greater or lesser extent. Thomas's work falls into the academic tradition of dishelief

⁴¹ Bennett appears to favour an approach which splits the women into two camps and then characterizes paranormal phenomena on four continuua. The chance of either group of women accepting an event as real depends upon the event's position on the continuua. See pp. 31-35

pointed out by Hufford. As he states in the introduction to his book:

...ghosts and fairies are now all rightly disdained by intelligent persons. But they were taken seriously by equally intelligent persons in the past, and it is the historian's job to show why this is so. (ix)

It is precisely because his book is a history, relying on published texts and not considering contemporary fieldwork, that it totally misses the extant and widespread belief in the existence of ghosts. Instead he quotes Blauner in attributing the lack of modern ghosts to demographic change.

The relative absence of ghosts in modern society can thus be seen as the result of a demographic change: 'the disengaged social situation of the majority of the deceased'. 42

Similarly Thomas states of 18th century ghost beliefs:

If [the people of the time] stopped seeing ghosts it was because such apparitions were losing their social relevance, not just because they were regarded as intellectually impossible. (606)

Gillian Bennett whilst breaking out of the strait-jacket of the cultural source hypothesis still focuses on the functionality of ghosts. 43

...these concepts have two vital psychological functions. Firstly, they are strengous attempts to bring rhyme and reason to a

⁴² Thomas, 605. Quote is from R. Blauner, "Death and Social Structure", Psychiatry XXIX (1966)

^{*}Commenting on an earlier draft of this chapter Gillian Bennett observed that this is a bit unfair to ber, stating that her comment was intended as an empirical observation: "I didn't (don't) suggest that this is an explanation for ghost belief in the manner of folkoristic adaptations of functionalism. I see the evolving traditions of ghosts as a series of attempts at an explanation, each shaped to some extent by the changing historical/philosophical/regious context." Operand communication).

chaotic world. Secondly, they give the highest sanction to traditional female values and are thus the strongest justification of the lives the women have led and the duties they have given their lives performing. (Traditions 212)

This falls squarely in the British tradition of functional anthropology that can be seen hest in the works of Malinowski, who analyses the function of magic as being to release anxiety when a person is faced with a bad situation. Whilst not denying that such beliefs play an important part in the lives of individuals and communities, I believe it is important to to isolate explanation from event.

UFOs

The issue of UFOs is considerably more confused than that of ghosts, yet is paradoxically easier to unravel if one differentiates between explanation and event, because that is precisely where the confusion lies. As Peter Rojcewicz writes:

A major obstacle involved in securing adequate definitions of unorthodox phenomena like UFOs stems from the failure of the present terms to differentiate between descriptions and interpretations of events. ("Extraordinary" 132)

Thus, as Rojcewicz points out, the acronym UFO, which was invented by the American Air Force, is full of evaluative assumptions about the nature of the phenomenon it is supposed to label. That is to say that if one calls something

⁴⁴ See for example Malinowski, Coral Gardens and their Magic.

an 'unidentified flying object' one makes certain a priori assumptions — that it is possessed of some type of motive power and that it has a material existence. Analogous objections can be raised about the term "flying saucer" (Price-Williams, 224).

The reason for the confusion of terms is due to the dominance of one particular explanation that has been proposed for the phenomenon, which is that UFOs are extra-terrestrial craft visiting the Earth: the "Extra-Terrestrial Hypothesis" (ETH). This seemingly simple hypothesis has spawned a host of questions. If we are being visited who is doing it? How are they doing it? Why? What are the effects on us? Does the government know? Does it have evidence? If it does have evidence why isn't releasing it? It is these questions that have dominated ufology, at least in America. It is the UFO paradigm because it delimits both the types of answers that may arise and the types of questions that may be asked. Ufology has become the search for evidence to support the ETH.45

Separating event and explanation allows us to concentrate on the phenomenonology of the event. In so doing we are freed from the constraints of the ETH, which has directed so much work in ufology in the same way that the cultural source hypothesis has dominated studies in folk belief. In particular this allows a redefinition of the field. So, for example, Rojecwice,

⁴⁵See for example, Gilmorr, Final Report of the Scientific Study of Unidentified Flying Objects; Hendry, A UFO Handbook; Hynek, UFOs: The UFO Experience; Sagan and Page, UFOs: A Scientific Debate.

is concerned to demonstrate that UFO encounters can be placed on his Extraordinary Encounter Continuum and Hufford demonstrates that "anomalous lights" seen in the sky appear to have been with us for a long, long time ("Humanoids"). As Linda Dégh states:

Since immemorable[sic] times people frequently looked at the sky. In many instances there was something to catch their vision.... Man saw the Wild Hunt, the Headless Horseman, dragons and spirits flying with sparkling lights....

In our civilized western world people do not see these things anymore. All they can see are flying saucers at low altitudes. ("UFOs" 242)

It is the observation that anomalous lights may have been seen throughout the lifetime of humanity and that it is the ETH which is 'new' that has inspired authors, such as Jacques Vallee, to attempt to demonstrate a continuity. So, for example, Vallee quotes a case from Japan in the year 1235AD in which "mysterious sources of light were seen to swing and circle in the southwest, moving in loops until the early morning," (Passport 5). In this case not only is the description of the event remarkably similar to modern accounts, but the Japanese response to it is completely analogous to the present day military investigations of UFOs.

General Yoritsume ordered what we would now term a "full-scale scientific investigation," and his consultants set to work. Fairly soon they made their report. "The whole thing is completely natural, General," they said in substance. "It is only the wind making the stars sway." It would seem, that like the ghost traditions analysed earlier we have a phenomenon that has constantly been reinterpreted. Before UPOs were extraterestrial craft they were phantom aircraft (Litzgren and Svahu), phantom airships (O'Chariton; Watson), phantom suns (Plot), or flying ships from the cloud world of Magonia (Vallee 9-10). This not to say that there has been a direct progression of explanations, but that over time the explanations for anomalous lights in the sky have shifted, changed, evolved or been usurped by totally new ones.

A fairly recent example of a shift in explanation comes from Newfoundland which has a long tradition of explanations for anomalous lights that appears to be being superceded by the ETH. The effect of this can be seen from the following entry, collected in 1974, in the Memorial University of Newfoundland Folklore and Language Archive (MUNFLA). The text is reproduced here in full as it appears on the card.

The older people believed in warning lights. A warning light was supposed to be a light which passed low over the ice out towards the sea and it predicted a bad storm. I haven't seen any warning lights or heard talk of any been seen while I was growing up but I heard grandfather say many times that "if you seen a warning light you were guaranteed to have a bad storm the day after one was seen." Warning lights were usually red but were sometimes green they were usually considered a bad omen.

Seven or eight years ago red lights were seen around home, although I didn't see any several people said they did but the strange thing is people didn't consider them to be warning lights but UFOs. This got people very upset and scared more than warning lights did. People on the coast seem to be more scared of the unknown and abstract than any of the known and concrete.

(FSC 74-103/16)

In this case the shift in explanation has altered the reaction of the community to the event from one of acceptance to one of fear.

Explanation and crop circles

The focus of this thesis then is not on whether or not crop circles exist, for they do, but on explanations for their existence and their formation. It is the mapping out of the relationships of the various postulated explanations to extant paradigms of explanation which will, I hope, shed some light on the nature of those paradigms. It is the explanations for the causative agent(s) behind the circles phenomenon that generate this thesis's questions. Who holds these explanations and why? From where do the explanations some and what relationships do the various explanations have with each other? In answering some, or at least using, these questions it becomes possible to look at an issue of folk belief from a macroscopic level.

Perhaps the most important thing about this study is that the circles phenomenon has reached a fever pitch of excitement in the last two summers that it may never reach again. In this climate people have to take notice of the events and the events are so seemingly anomalous that people have to find explanations for them. Consequently the whole dialectal process is out there in the open; people are involved at all levels and at least one of the formations of the summer of 1990 — the Alton Barnes pictogram (See figure 1.12, pg. 49) — shows all the signs of becoming at least a temporary cultural icon

The argument is then that there are various explanations for the origin of crop circles and that these explanations will be internally consistent as well as conforming to certain paradigms. In a sense I am arguing for the analysis of folk explanation as a folklore genre. This directly follows on from the concept of folk beliefs as rational, systematic methods for making sense of the world. As Gillian Bennet states:

Far from being 'irrational', they are the results of a rationalizing impulse, and far from being 'superstitious', they are the results of careful thought and corporate discussion... (Traditions 212)

I will discuss the ramifications of considering explanations as a genre later, for now it is salient to note a few points. Firstly, explanations are creative, which is to say that given some facts it is possible to fit them into the explanation, in much the same way as it is possible to take a series of events and turn them into a marchen, legend, joke, ballad or whatever. In this case the explanation acts as an organizing principle. Secondly, explanations determine what is and what is not a part of the phenomenon that it interprets. Thirdly, it is possible to find parody explanations such as the "rogue hedge-hog" explanation for crop circles that has become an esoteric joke amongst circles enthusiasts. Fourthly, there are certain anti-explanations that seem to fit the same relationship to explanation shat anti-legends do to legends, which is to say that they take an explanation and turn it on its head for the

purpose of discrediting the original.

2.4 Methodology

Having sketched the limits of my intended subject it is necessary to spend a little time explaining the methodology I used to gather the data and the principles behind it.

What I did can be best described as taking a 'snap shot' of crop circles folklore over a period of ten months, using a methodology that owes its main intellectual debt to the Mass Observation movement founded in the UK in the 1930s. ⁴⁶ The basic principle was, at heart, to collect anything that so much as hinted at crop circles regardless of whether it originated in folk, popular, elite or any other category of 'culture' that one may care to posit. Offhand comments by professional folklorists, condom advertisements, uses of crop circles as referents, all these were considered to be the results of the interaction between the phenomenon and society. These products were backed up by the more traditional folkloristic techniques of interviews and archival searches.

To an extent this approach is the result of my attempt to discern a single, ideological domain for the subject.⁴⁷ This is not a situation in which I could

⁴⁶⁵ce, for example, Tom Harrisson and Charles Madge, Britain by Mass Observation. Crescent ed. (London: Century Hutchinson, 1986 [1939]). For an example of the application of their methodology see Mass Observation, War Begins 24 Home (London: Chatto and Windus, 1940). My thanks to Paul Smith for these references and the introduction to the Mass-Observation archive at the University of Sussex, UK:

⁴⁷The phraseology in this case is intended to be evocative of Elliot Oring's call for the, "conceptualization of a single ideological domain to which folklore, news, literature and court cases belong," ("Legend").

travel to a small, self-determined community and use that to delimit my investigations. Crop circles have become an international phenomenon and were a major part of everyday life in Britain for a few weeks in the summer of 1990.

Originally I had intended to focus on self-contained groups of enthusiasts, in much the same way Linda Milligan did in her analysis of UFOs as a contemporary legend ("UFO"). However, I quickly realised that such a study seemed to miss the sense of national importance that the phenomenon has acquired. On the other hand, the process of gathering dites about the phenomenon did not seem to tell me enough about the systems of beliefs that appeared to be evolving. It was for these reasons that I felt it useful to neither concentrate on a small number of circles researchers in great depth nor to just compile a compendia of beliefs, but to integrate both techniques.

Inevitably, what I collected was no more than a fraction of what occurred.

I was in much the same position as a man trying to understand a river by standing in the middle of it and collecting handfuls of water as it flowed by. I became almost a kind of 'candid camera' folklorist. If I overheard people talking about crop circles I made notes as soon after as possible. In my everyday life I asked anyone I came across, check-out workers, bar staff, shopkeepers, friends, the person next to me on the train, what they knew about crop circles and what they thought about them. I also tried carrying photographs and books in conspicuous places in hope that people would come

up to me, and they did.

This fairly unorthodox approach was supplemented by more in-depth interviews both with circles enthusiasts and with everyday people which allowed me to begin to map out the existence of particular explanations throughout society. It also gave me leads to use when trying to determine the relationship between the explanation and the paradigm with which it was associated. In a sense I was using my informants' explanations as a guide to the phenomenon.

As I mentioned above, although this may seem an unorthodox methodology it does have its precedent in the pioneering research technique that Tom Harrisson termed "mass observation" (Harrisson and Madge). The aim of his research was to collect quantitative data about the opinions of the British nation about certain matters. He did this by setting up an archive and recruiting observers who would keep diaries and fill out questionnaires about specific subjects. The observer's task was to note down anything which he or she observed that appeared to them to pertain to the subject, and then report their findings back to a central arrbive. The aim was observation of the masses by the masses. Ironically, though the goal of the method was quantitative analysis, they ended up collecting material that was much more suitable for qualitative ethnography. Left to their own devices the observers made their own, native judgements about what should go into their diaries and consequently the nation has inherited a wonderful amount of ethnography.

graphic material from the 1930s and World-War II. In my studies I played the part of one mass observer desperately trying to collect as much material as possible, as well as the central archive.

A more detailed analysis of the type of data I collected and the issues that it raised is given at the start of the next chapter. This chapter focused on the concept of explanation and gave some preliminary ideas about how it relates to the subject of supernatural folk belief in general and crop circle beliefs in particular. My fieldwork methodology evolved out of my interest in systems of folk explanation and the practicalities of what could be achieved in the time available. Inevitably, I feel that there is still much to be done. This is a huge subject and there are many facets to it which simply do not fit into a thesis of this scope. For now I wish to make use of perhaps the unique feature of the crop circles phenomenon: that it is a mystery that can not be dismissed as nothing more than misperceptions and tall tales. Of course the circles may all be hoaxes but that possibility by no means invalidates the issue at hand. It is the whats, whys and hows of the beliefs about crop circles that have been highlighted by the phenomenon, and that is what the rest of this thesis is devoted to discussing.

Chapter 3

Crop Circle Explanations

Introduction

This chapter presents most of the data to be used in this thesis. In doing so it illustrates the main explanations for the origin of the crop circles. As such it combines a presentation of the fieldwork that I undertook in the summer and autumn of 1990 and something of a review of the crop circle literature. Although this time period will provide the basis for most of the data, where it seems appropriate I also draw on some interviews conducted in Newfoundland in the spring of 1991, as well as discussions about the phenomenon that are currently taking place over computer networks.

To foreground the concept of explanation in the presentation of the data this chapter will be organised around the various explanations that have been put forward. There appear to be three popularly successful explanations that have various adherents, and the main body of the chapter will be devoted to discussing each of these in term. I will also consider various less successful explanations, as well as what could be described as an anti-explanation, in the closing section of the chapter.

As stated in the previous chapter, during my field-work I collected, essentially, everything that came my way. It was not a genre-based operation. In this thesis my basic unit of analysis can be best described as an "explanation": a collection of dites about a subject. Normally, a dite — a succinct expression of belief — could be of the form, "I believe crop circles are caused by whirlwinds". Such a dite, though providing a concise statement of opinion, does not illuminate the whys and wherefores of the opinion for it is not explanatory in or of itself. An explanation is an expression in which the believer puts forward some reason as to the basis for this choice of opinion. The example below should help to clarify my intended meaning.

Interview Collected from a member of the bar staff at a night-club in South-West England. Woman in mid-40s, interviewed after night-club has closed. (Interviewer, BM, woman, SW.)

- BM I'm interested in crop-circles. You know, the circular marks in fields.
- SW Oh yes, them. They're really fascinating. I would love to know what causes them.

- BM So would I ... ((both laugh))
- Actually I would like to know what you think causes them.
- SW Idon't know. ((pauses)) I've heard it's whirlwinds that land in the field. I don't think it's ((pauses, laughs)) anything, you know, from outer space. No. It's not that I don't I believe in, that...there's things from up there. ((gesturing to ceiling).
- BM You think it's whirlwinds then?
- SW Well it seems possible. I mean if it was, you know, flying saucers or anything you would think they would leave footprints.¹

Fundamentally this kind of expression is the result of me trying to elicit
a statement of opinion from an informant and then asking them why they
hold that opinion. In this example the only dite expressed occurs when the
woman says, "I've heard it's whirtwinds that land in the field." Indeed,
it is immediately noticeable that she does not give much commitment so
her belief: if not for the rest of the interview it would be ambiguous as to
whether it is the case that she believes that crop circles are so-caused. The

¹Certain transcription conventions are used throughout this thesis. In tape transcripts, punctuation carries performative rather than grammatical information, with a comma marking a short pause and a period a longer one. Very long pauses are indicated by line-break terminated with three dots. Para-and extra-linguistic information is inserted in double parenthesis. Editorial information is inserted in square brackets. Three dots inside double parentheses indicates omitted or indecipherable text. In untaped texts punctuation is used grammatically.

²Her use of an T've heard. .' construction appears to be a linguistic due to the level of her belief on a par with those analysed by Gillian Bennett in Traditions of Beliefy (213). According to Bennett's framework for analysis, the constant pausing and laughter is best interpreted as non-committal or slight disbelief. Bennett's phrasal and paralinguistic cues mark the text as indicating that although SV believes in the existence of UPOs, and in their explanation as alien spaceships, she finds it difficult to accept crop circles as evidence for this point of view.

explanation is brought out by the interaction between the interviewer and

It would seem then that there is no obvious explanation in the example above, for the woman does not at any point list the reasons why she believes whirlwinds cause crop circles. She does, however, clearly rule out the hypothesis that crop circles are caused by alien spaceships landing in fields. Furthermore, she does this by logically inferring some results of such a hypothesis and then noting that the evidence (no footprints) rules against it, a classic, scientific reasoning. For her the failure of this hypothesis seems to leave only the "whirlwinds" theory. In a sense, it can be seen that she has used a technique of elimination to leave her with an explanation. Perhaps surprisingly this technique is a common feature of the interviews I collected. The general form appears to be a statement of opinion followed by evidence that either invalidates other explanations or supports the one espoused. Obviously as this was the way I was structuring my questions this is what I got; however, I make some notes on a semi-serious discussion about crop circles that took place in my presence during my fieldwork in the final chapter and in that case the presentation and defence of explanations did follow a similar pattern to that outlined above. Inevitably, however, the form of the explanations presented in these pages is an artifact of the method by which I elicited them.

Usually I introduced myself, as above, as someone who was studying crop circles which usually resulted in the interviewee asking me what caused them. Whilst talking with individuals I employed a variant of Hulford's phenomenonological interview methodology (Terror xv xvi), by asking for a statement in a blunt manner at the beginning of the interview and then using the interviewee's own response and language to guide my replies whilst trying to avoid leading questions. This enforced a certain passivity upon me and my responses that I think the subjects occasionally noticed and responded to. This set of factors allied to the interviewee's position vis-a-vis the phenomenon — generally I found that people were interested and wanted to know what caused crop circles, regarding me as an "expert" — contributed, I believe, to the respondents' characteristic reluctance to espouse their own theories.

Finally, the context of the interview itself prevented me from taking notes at the time. This was the price I paid for trying to make the context as natural as possible. In all cases, after I had asked for opinions about crop circles, I informed the person that I would like to be able to use what she or he had just said as exemplary material in a thesis and asked permission to do so. Only rarely was I refused. This did mean that I often had to make notes after the event; in the interview above I had to wait for over two hours, and consequently I could record only what my sometimes selective memory could recall for me. In this day and age of ethnographic research such an approach

may seem like a retrograde step but it did provide worthwhile data. Coming from a folk speech/ethnography of speaking background myself, having to rely on such texts goes a little against the grain. I can only hope that my training has allowed me to capture the basic verbal strategies used by the respondents, as well as the general structure of the explanations as they were expressed to me.

Organisation of the chapter

Each section of the chapter deals with one or more explanations for the phenomenon and the ways in which they are expressed throughout a range of people associated with the phenomenon. The crucial organising principle is that each individual stands in a certain relation to the phenomenon. Everyone from a dedicated field researcher to someone who neither knows nor cares to know anything about crop circles can be seen as being in some sort of relationship to the knowledge about the phenomenon. Thus I believe it is both fair and relevant to start each section with the exposition of the explanations held by those who have investigated and disseminated knowledge about crop circles, for it is they to whom interested parties turn when they want information. The circles researchers have become the acknowledged "experts" about crop circles, and they tend to act as repositories information, both transmitting and receiving it. Whereas landowners may be asked for their opinions about crop circles that appear on their lands, or meteorologists may

be asked about the viability of Meaden's theory, it is the circles researchers who control the dominant flow of information. If a fieldworker were to travel to the UK and ask someone for information about crop circles, they would almost certainly be referred to Colin Andrews or Terence Meaden: a situation that is analogous to a fieldworker travelling to a community and asking for traditional singers or tale-tellers.

Consequently, in describing the prevalence of an explanation throughout society, I will start with the most clearly articulated and most extensively researched form of the explanation. So, for the meteorological explanation, I start with Terence Meaden's concept of the plasma vortex despite the fact that it involves an esoteric level of knowledge, about which many informants who espoused a meteorological explanation really knew very little, if anything. A similar situation exists in the cereological school of thought. Its leading proponents tend to reject the alien spaceship hypothesis that most of its less-involved members believe in. By so presenting crop circle beliefs, I hope the relationships between the various expressions of these beliefs within their associated explanations will become clearer.

3.1 The Meteorological Explanation

The meteorological explanation asserts that crop circles are created by a natural atmospheric wortex. This explanation allows no room for an intelligent origin to the circles effect. That is to say that the postulated wortex is considered to be of the same order as hurricanes, heat eddies and other natural atmospheric phenomena and to be no more amenable to intelligent guidance than them. As Paul Fuller says:

...it seems totally unnecessary to associate the circles with more exotic explanations and I reject the theory that some kind of non-human "intelligence" lies behind the phenomenon without reservation. (Controversy 101)

The leading proponent of this theory is Dr. Terence Meaden, an atmospheric physicist with strong academic credentials. Currently he is the editor of the Journal of Meteorology UK and director of the CERES crop circle database. However it should be pointed out that Meaden is not a member of the academic mainstream, being neither attached to a research organisation (he runs his own) nor part of an academic community. He lives in the west of England, from where he directs his investigations. The journal he edits is described as "an international magazine for everyone interested in climate and weather, and in their influence on man." It keeps track of climactic disasters, thunderstorms, tornadoes, lightning strikes, even spontaneous combustions, as well as the more mundane records of temperature maxima and minima, wind strensths and prevolutation. The focus of the journal is the effect of

weather, normal and exotic, on everyday life. Consequently it is fair to say that, in terms of his social setting and his interests, Meaden has connections with orthodox meteorology but occupies a fairly marginal position. This has had an enormous effect on how his theories have been received by the meteorological community.

Several individuals have rallied around Meaden's banner both from within and without orthodox science. Undoubtedly his most strident backers have been Jenny Randles and Paul Fuller, both members of the British UFO Research Association (BUFORA). As a full time author working mostly in the field of UFOs, Jenny Randles is probably the most famous ufologist in the UK, and Paul Fuller, a professional statistician, has been one of the leading members of BUFORA for over a decade. Both are known for their rejection of the extraterrestrial hypothesis for the origin of UFOs long before the advent of the crop circle phenomenon. As previously mentioned, Meaden's explanation seemed to offer them a chance to finally bury the Extraterrestrial Hypothesis (ETH) and Jenny Randles' influence as a successful and productive writer has enabled them to publish a major work in support of Meaden's theory — Crop Circles: A Mystery Solved.

The term "meteorological" was chosen for this particular explanation both because it is widely used amongst those who study the circles and because it allows for a wide variety of natural atmospheric phenomena as the circles effect. Meaden's particular theory has changed drastically from its first formulation, and he now espouses a very esoteric atmospheric phenomenon, a "plasma vortex", which is neither well known nor fully accepted within the meteorological establishment. However Meaden's theory provides a useful place at which to begin this exposition because the discussion it provokes and its dissemination throughout the circles researchers, the farmers whose fields are affected, the enthusiasts and casual tourists who come to see the effects and the populace at large, has generated a major part of the crop circles discourse.

3.1.1 Terence Meaden and the plasma vortex

Writing in The Circles Effect and its Mysteries, Terence Meaden states:

In 1980 my initial thought, having seen two plain circles near an escarpment, was that an atmospheric vortex was involved. A type of fair weather whirlwind seemed plausible at first, except that it needed to be a vortex which differed from the usual in that, although external rising currents might be assumed in the normal way, the theoretically-known internal downdraught was abnormally pronounced, at least for that brief period during which the flat bed and outflowing spiral pattern were created. (91)

In many ways this earliest formulation of the theory is the one that is most accessible to those of us without specialist qualifications in atmospheric physics. I expect there are few people who have not seen fair weather whirl-

The degree of acceptance of Meaden's theory amongst professional meteorologists is a matter of some debate. For various points of view see, The Crop Watcher 1 (1990): 27-28; The Crop Watcher 3 (1991): 22-23; The Crop Watcher 4 (1991): 10-12; The Circular 2 (1990): 24: Randles and Fuller, Musters Solved 221-227.

winds, "dust devils", spinning leaves around in a street. Indeed most farm workers are well aware of the sudden, destructive effects of whirlwinds on stacked hay, and there is a vast body of folklore about fairy winds: sudden strong gusts of wind or whirlwinds thought to be manipulated by fairies. The example below, from MUNFLA, makes this explicit.

Mrs Simon Nolan informed me that while she would be out during the summer months making hay a "gang of fairies" would come and take the stack of hay and spread it all over the meadow. She said today people in around here do not refer to it as such but they call it a whirlwind.⁴

The stationary whirlwind theory is, however, no longer the position held by Terence Meaden. There are many reasons for this change, the most notable being that it would seem that the vast majority of crop circles are formed at night, usually between the hours of 3am to 5am during the summer months. Fair weather whirlwinds are caused by the effect of daytime heating and therefore can not be responsible for the majority of crop circles. A corollary to this change has been a change in his opinion about the geographical distribution of crop circles. As recently as 1989, Meaden was writing in Fortean Times that the seeming clustering of circles sites in the south of England was an anomaly caused by the concentration of researchers investigating in that region. However he has since stated that the topogra-

⁴MUNFLA, FSC 74-102/38. The card dates the events as being from the 1920s-30s. ⁵Meaden, "A Note on Observed Frequencies." Randles and Fuller also emphasized this point, Mystery Solved 126, Controversy 101. There does appear to be some confusion about their stance but the following quote from Paul Fuller in Controversy is fairly clear.

phy of that part of the country, allied to its proximity to the coast, and the vast acreage of cereal-crop fields, provides prime circle generating conditions, thus implying that, regardless of the number of researchers that are looking in the area, there are more circles being generated there than in other places.

A brief description of the nature of the plasma vortex

This can, of necessity, be only a brief exposition of the salient features of the postulated plasma vortex; Meaden's theory can only be adequately presented in the terms of its relevant theoretical discipline and this thesis is not an advocacy of any one theory of the circles' origin. Finally, it is an esotetic enough construct to be only accessible to a relatively small number of people. However, it is vastly important for many reasons, not the least of which is the motivation it provides for Meaden and others to continue publishing, defending, and speaking about it. Therefore I give a brief, layman's overview of the nature and causation of the vortex, as well as pointing out those features of the phenomenon that Randles and Fuller have adopted in their attempt to explain the UFO phenomenon in terms of the vortex.

The prime cause of these vortices is supposed to be the passage of air over

^{...}the clustering of circles in the "Wessex Corridor" and the apparent progression in the complexity of the formation of the types are both accidents of the manner by which reports come to our attention. [101]

⁴Meaden, "Circles From The Sky" 48-50, "Crop Circles and The Plasma Vortex" 87.
⁷The best layman's introduction to atmospheric vortices in relation to the crop circle phenomenon comes in Revnolds "Whitlewids and the Circles Effect."

a small hill, escarpment or other similar feature of the landscape.* Under certain situations, as air flows over such a feature, it is possible for an eddy vortex to occur which is then carried downwind for a certain distance. These eddies are usually short-lived but can be carried for distances of 6km or so.* As the vortex lives out its brief life it is able to generate an electric charge when the volume of air becomes ionized. This may be due to the intense spin of the vortex. ¹⁰ Hence the term, plasma vortex, as the vortex of air becomes a plasmoid. Eventually, this rotating column of electrified air is no longer able to maintain its integrity and suffers a process known as "vortex breakdown", at which point it may impact the ground. ¹¹ This rotating, electrified vortex is then capable of flattening standing cereal crop in a spiral formation in a very brief period of time — probably less than 30 seconds. ¹² This event may destroy the vortex or cause it to "bounce" back into the air, possibly to form another circle formation a little further downwind.

The basic premise is that the circle formations are caused by the descent of a vortex onto a medium which is capable of being flattened into a spiral circle. The vortex itself is generated by an interaction of the lower atmosphere, known as the "boundary layer", with small hills and escarpments within the

^{*}Meaden, "Circles From the Sky" 30-31, Circles Effect 37-39; Reynolds, "Whirlwinds, Pt.!" 28.

*Meaden, "Circles From the Sky" 30-31, Circles Effect 37-39; Fuller, "The Hill Slope

Effect."

10 Meaden, "Circles From the Sky" 30-31, Circles Effect 37-39.

¹¹Bathurst; Meaden, Circles Effect 38-39, 78; Reynolds, "Whirlwinds Pt.2"; Snow 33-34.

¹² Meaden, Circles Effect 17-18.

range of 30m to 200m in height, relative to the immediate surroundings. 13

Perhaps most importantly, the vortex acquires an electric charge, partially
ionizing the air within, and thereby generates an electro-magnetic field. 14 So,
Meaden defines the plasma vortex or "circles-effect vortex" as follows:

It is an axi-symmetric body of fast spinning air thought to contain a significant fraction of ionized gas which may be in the plasma state. (Circles Effect 103)

Fitting the features

This theory has been used to explain many of the features associated with crop circles that were discussed in the first chapter. For example Randles and Fuller give a list of such correlations (Mystery Solved 140). I will briefly sketch some of the points here.

The apparent paradox of a force that can flatten circles without damaging the medium is explained as a necessary result of the application of air pressure (140). In this case analogies can be drawn with 'normal' wind damage to crops, known as lodging, in which the crop is often partially flattened into asymmetrical, ungeometric shapes.

The often noted precise nature of the circles' edges can be seen as a product of the surface tension of the vortex (140).15 The phenomenon of

¹³ Meaden, "Circles From the Sky" 31.

¹⁴ Meaden, Circles Effect 51.

¹⁵ Reynolds gives an alternate analysis, assuming the presence of contra-rotating sub-vortices within the parent ("Whirlwinds Pt.2").

"gap seeking", whereby the edges of the circle are distorted in the presence of tractor lines, is supposed to occur because the crop bordering the lines has less support from neighbouring stems and thus can offer less resistance to the air pressure. 16

The usual discrepancy of the swirl centre with the circle centre is explained as movement by the vortex during the period in which the circle is created.¹⁷ The swirl pattern itself, and the layering and banding phenomena associated with it, is held to be a natural consequence of the internal structure of the vortex and the slight movements of the vortex during circle creation.¹⁸ This is also held to be the reason for the generally non-circular shape of the circles.

When the subject moves to the more complex circle formations, the theory becomes more complicated. The existence of rings around circles is explained as the result of vortex sheathes.

19 These sheathes are well-attested in vortices such as tornadoes.

20 Circles with satellite formations may be explained by noting the existence of spinning columns of air that have been seen to circle around vortices at nodal points.

21 Furthermore Meaden postulates the existence of an "ion race".

22 A ring of ionized particles that may link all of these

....

¹⁶ Meaden. Circles Effect 71-72.

¹⁷Meaden, The Circles Effect 16-17. Reynolds's appears to contradict this, stating that the vortex does not move at all ("Whirlwinds Pt.2").

Meaden, The Circles Effect 14, 16-17; Randles and Fuller, Mystery Solved 140.
 Meaden, The Circles Effect 14, 16-17; Randles and Fuller, Mystery Solved 140.

²⁰ Meaden, Circles Effect 95-97.

²¹ Meaden, The Circles Effect 95-97.

satellite vortices, feeding an electric charge into them and being responsible for the frequent existence of very fine rings occasionally found linking the satellite formations in crop circles.²²

Those formations that show deviations from circularity pose the biggest problem for the theory. For example Meaden admits that circles with radial spurs, looking not unlike spy-glasses, are difficult to explain with the current version of his theory.

At the time of writing this seems to be one of the hardest mysteries to explain.... Unfortunately the evidence available is severely limited, and the present thoughts are liable to undergo considerable revision when more more exactly-dated circles can be examined. (Circles Effect 73)

Randles and Fuller suspect that such spurs may be caused by hoaxers adding to genuine circles and may thus not be a meteorological phenomenon (Mystery Solved 140). However, one atmospheric physicist has published a meteorological theory that may account for such spurs.²³

The existence of the pictograms is seen by many to totally invalidate the meteorological theory24 and so far Meaden has not proposed an explicit explanation. Instead he has observed that these forms are the result of vortices self-destructing when they contact the ground, splaying their internal structure across the corn field, and thus provide useful tools for the analysis

²² Meaden, Circles Effect 64-66.

²³Bathurst 71. Bathurst's more general formulation of a meteorological origin also claims to be able to deal with the "swastika" formation discussed earlier.

²⁴Cf, the discussion above.

of the normally hidden composition of the vortices.²⁸ However, it should be noted that such pictograms do compose a vanishingly small subset of the phenomenon, about 12-18 cases out of a known database of more than 1500 circles.²⁸

This is by no means an exhaustive illustration of the various aspects of the meteorological explanation and, of necessity, it has been based largely on Meaden's version of the theory. However at this point it is useful to give an overview of the work of Randles and Fuller as they attempt to explain the UFO phenomenon in terms of the meteorological theory.

3.1.2 UFOs and the plasma vortex

As mentioned earlier, Jenny Randles and Paul Fuller both became involved with the crop circles phenomenon in an attempt to divorce it from ufology. As Jenny Randles said:

However, as we said right at the start of this, um, when we got involved in this for the first time: we—were presuming that we were doing it to clear the UPO field from this — myth of UPOs being responsible for crop circles. We've now come round full circle to an extent, if you pardon the oun.²⁷

²⁵Verbal answer to a question at the First International Conference on The Circles Effect, Oxford, June 1990 and "Major Developments in Crop-Circle Research in 1990: Part 3" 164.

²⁶The estimates vary. The latest figure from CERES is, of April 1991, 1750 (Meaden, "Major Pt.3").

²⁷Randles and Fuller, "Corn Circles Update." Taped BUFORA lecture, London, Sept., 1990. Tape 1 side 2 rev. 448-452. Hyphens indicate pausing.

Indeed they have now taken various of the postulated features of the plasma vortex and used them in an attempt to describe 'genuine' UFO cases — those cases in the literature that appeared to be inexplicable according to contemporary scientific knowledge. By doing so they are totally denying the ETII and this has led to a lot of bad feeling. Not only do they fail to ascribe an intelligent origin to the crop circles but they also attempt to explain another huse mystery in the same way.

Physical appearance and behaviour of the plasma vortex compared to UFOs. At its most basic level, a UFO is, at night, a self-luminous object usually seen at low altitudes and, during the day, a reflective, "daytime disc" (Hynek 41-79). The level of detail, "definition", varies depending on the conditions. Both Randles and Fuller as well as Terence Meaden contend that this fits the requisite description of a plasma vortex perfectly. So, Meaden says of daytime vortices:

The equilibrium state is a sphere, but, if the surrounding air is flowing, an elongated shape results — ellipsoidal or cigar-shaped. And, when the mass is spinning, as always in a vortex, the shape is all the discould form. Thus we approach, more and more closely, the classic vision of a metallic object in the daytime sky which, however, by consisting of nothing more than the constituents of the atmosphere, can dissolve and rematerialize with incorporeal ease. (Circles Effect 85)

At night the plasma vortex would be self-illuminated due to the presence of the electric charge and could glow different colours depending on the immediate environment. For example, Meaden postulates that vortices in water-saturated air may glow red/orange (59-60). Also, Ohtsuki analyses the movement patterns, patterns that would be impossible to duplicate in any atmospheric vehicle known to exist, of a postulated plasma vortex picked up on a ship's radar in the Pacific Ocean near Hawaii (81-85).

The argument is that such vortices look like UFOs from a distance, can be seen on a radar screen, and can appear to behave like UFOs. These UFOs in which some degree of internal structure is perceived are claimed to be misidentifications in which the percipient has, subconsciously, imagined a structure based on their cultural preconceptions.²⁴ Reviewing their book David Revnolds approvingly summarizes their stance:

... Randles and Fuller not only believe that a vortex can account for crop circles, but the illuminated form can explain away the rare but high-quality reports of glowing lights appearing in the sky usually being reported as descending to road level and often causing engine failure in petrol-driven vehicles. Combined with strong rotating winds, electrical fields and 'smells' (nitrogen oxides and cosne), it is quite easy to imagine the petrified state of a lone driver at night. With no other credible explanation, the witness would report it (if at all) as a spaceship, grafting onto the featurcless light details of fins, windows, ramps, etc. (Review 99)

Car stops. Randles and Fuller give several examples of so-called "car stop" cases in which a motorist finds his car's electrical system adversely affected by

²⁸ Randles and Fuller, Mystery Solved 84.

a UFO.²⁹ They postulate that this could be an effect of the electro-magnetic field generated by the vortex.²⁰ Meaden has also published data to this end (Circles Effect 78-82). The mechanism by which this works is currently unknown and what little research has been undertaken does not appear to support this hypothesis (82).

Close encounters of the third and fourth kind. This final category is the most controversial. Randles and Fuller state that an individual struck by a plasma vortex will suffer neurological trauma, amongst other things, from the impact of an electro-magnetic field on the brain. Thus they assert that encounters with aliens from spaceships, and even the abduction of individuals by aliens (so-called close encounters of the fourth kind) can be explained in terms of hallucinations that are interpreted according to certain cultural models. They draw their inspiration from Michael Persinger's work which appears to demonstrate that electro-magnetic fields can cause temporal lobe hallucinations in those who are particularly sensitive to such events. 31 They also note that most alien encounters are discovered through regression hypnosis, wherein a therapist attempts to uncover "hidden" memories by causing the subject to relive the experiences. This process is by no means fully accepted amongst practising psychotherapists and may be one

²⁹Randles and Fuller, Mystery Solved 198-20, "Crop Circles: A Scientific Answer" 111-

Ja Fuller and Randles, "Crop Circles: A Scientific Answer" 117.

³¹Persinger and Lafreniere; Randles and Fuller, Mystery Solved 174-175.

in which the subject creates narratives in order to please the questioner.32

From all this Jenny Randles and Paul Fuller conclude that it may well be possible to subsume the study of UFOs within that of meteorology, and they argue that the ETH should be totally repudiated by ufologists. It is not a stance that has won them many friends in the ufological community.

3.1.3 Who believes in the plasma vortex?

Attempting to discern the level of folk belief associated with this explanation has been the most difficult, primarily because so very few people outside of those immediately associated with Meaden's theory appear to expouse it as an idea. The one notable survey that has been done, Paul Fuller's for BUFORA in 1987, seemed to show a reasonable baseline of support for the meteorological theory amongst farmers in the south of England, but the situation may have changed since then.³³ Furthermore, no one appears to have polled the general populace.

³²There is currently a heated debate about the suitability of regression hypnosis for individuals suffering psychological trauma and in particular about its use in unovering 'proof' of alien abductions. A sample of readily accessible viewpoints can be seen in Strieber, who underwent such therapy; Hopkins, who practises regression hypnosis; and Klass, who believes that it is adaptenous practice.

³³The survey is presented in Fuller and Randles, Controversy 87-94 and summarized in Randles and Fuller, Mystery Solved 129-130.

Farmers

The examination of farmers' beliefs provides a useful index to opinions about the phenomenon for they are the group of people whose livelihoods are most directly influenced by it. That said, it should be noted that the number of farms that have been visited by circles are very small compared to the number which have not. This is possibly responsible for the interesting statistic that appeared to show that some 70% of farmers were unwilling to state an opinion about the possible origin of crop circles (Controversy 90). Of those that did state an opinion, there was little consensus with the hoax theory being supported by the largest minority. In fact the results lead Fuller to state that "the phenomenon is of little interest amongst the landowners concerned," (91).

Those farmers who do have an interest tend to be the ones, unsurprisingly, who have suffered a circle formation, and they tend to be fairly evenly
split between the hoax explanation and the meteorological one. Those that
do support the meteorological explanation often use personal experiences of
natural atmospheric vortices to support their views, as the following letter,
printed in The Sunday Telegraph, demonstrates:

For the information of those interested I report that I know a field which has for many years been a grass field, until this year when it was sown to wheat.

³⁴Fuller estimated in 1987, based on the responses to the BUFORA survey, that there should be approximately one circle formation appearing per 246 square kilometers per year (Controversy 89).

As a grass field, often during haymaking, at a certain spot in the field a whirlwind came and lifted the loose hay into the air as a whirlwind does. This year being planted to wheat it was noted, at the same spot as the whirlwind appeared when haymaking, a corn circle appeared, so I have a good idea of what caused at least one corn circle (L. Pearce, 26 Aug. 1990: 23).

A similar reasoning process can be seen in Fordyce Maxwell's "farming news" column in the *The Scotsman*. He briefly summarizes and dismisses various other theories and then says:

I believe [Meaden] is right. I haven't seen it in grain, but have seen local whirlwinds at this time of year sweeping swathes of hay into the air. (23 Jul. 1990: 15)

Obviously, much has changed since Fuller's survey in 1987. Until 1988 the average number of reported formations per year seems to have been about 10-15. In 1988 about 100 were found, in 1989 some 300 were reported, and in 1990 some 600 or so. Undoubtedly the phenomenon is having a much greater impact. Indeed, it would seem that those farmers must prone to circle formations are increasingly perceiving the investigators and the casual tourists as something of a seasonal nuisance. The owner of the field in the Devil's Punchbowl at Cheesefoot Head employs guards and has erected barbed wire all around the field. Another encounter to which I was privy, between an irate farmer and some circles investigators, gives an idea of the hostility that can occasionally emerge.

Encounter at a farm in the south of England. There were four investigators and myself in the newly discovered formation. The farmer was spotted striding over the crest of the hill above the formation. One of the investigators, (1), moved forward slightly to confront the farmer, (F), whilst the rest of us huddled together for protection. (Names, dates and any other possible identifying features have, obviously, been omitted.)

- I Good morning! My name is "I". I'm sorry we couldn't get in contact but we have done our best to avoid damage.
- F Oy. Can't you read. ((pause)) I've just sprayed this field this morning. The sign says no entry.
- I Yes. As I say we had no way of contacting you...
- F Well you shouldn't be here then should you! How would you like it if I decided to walk all over your garden! Hey?
- Another investigator ((The only one of us in shorts, he had been looking closely at his legs.)) We don't intend to cause any harm but you must realise how important this is...
- I Yes. Surely you want to discover what causes these circles? Once we know then perhaps they will stop manifesting on your land...
- F You want to know what I think. I don't give an effing monkeys what causes them! Now just get off my land!
- I This could be the most important...

 F I'm telling you. The sign's up for your own protection. That
- F I'm telling you. The sign's up for your own protection. That pesticide can cause all sorts of rashes on bare skin and it's not safe to be in the same field for a day after it's sprayed.
- At this point all decided that it would be most diplomatic to retire.

My own attempts at contacting farmers seems to confirm the lack of consensus in that group of people. Possibly this was because the only method I had of gathering opinions was unsolicited telephone calls and/or letters. In such circumstances the people I talked to were understandably cagey. One farmer who had had a couple of circle formations in his fields had the following to say.

- I (BM) talked with the farmer (GR) on the telephone in February, 1991.
 - BM I am interested in knowing whether you have heard about the "crop circles" that seem to appear in cereal fields during the summer.
 - GR You mean the ones with the flattened crop?
 - BM Uh, yeah. They were in the news quite a lot this summer.
 - GR Damn right! We had one. It was the damnedest thing. Down in the bottom field.
- BM Oh right. Was it the first you knew about them?
- GR I've only been here 3 years now so I wouldn't know.
- BM Yeah. Do you have an opinion on what caused it?
- GR. Oh, it's those whirlwinds.
- BM Whirlwinds?
- GR. I asked a few people about it. I've seen whirlwinds myself in the fields and like. Mind you I've never seen them leave marks like that but I guess it's possible. Either that or it's just some of the lads from the pub!
 - BM Do you think a whirlwind caused this circle then?
- GR I don't see why not. Look sorry to be rude but I've got to go.
- BM No problem...

Randles and Fuller also quote various farmers' opinions, including this one from Cliff Garner from Leicester, in *The Harborough Mail* (20 Jul. 1989), which appears to be fairly representative. I am as mystified as everyone else, but I think all this about the Martians having landed is a standing joke. If I had to advance a theory it would be some kind of a wind current with an eddying effect, although why it should have occurred where it did is beyond me. The way in which the perfect circle was formed suggests this cause to me but it is really only a guess. (Mystery Solved 221)

Generally, a characteristic uncertainty appears to pervade the views of the farming community, the only consensus appearing to be the rejection of any theory that advances a supernatural explanation. Perhaps this view is best expressed in the following comment from William White, the technical advisor to the UK National Farmer's Union, in The Independent On Sunday:

For all we know they could be caused by the way 14 sofas are positioned in a village in Wiltshire. I'd put my money on a scientific explanation, but I don't even understand the theory, I've only got O-level physics. If an outer intelligence can make spaceships they wouldn't be so obvious about landing. (22 Jul. 1990: 25)

Meteorologists

Just as farmers' livelihoods have been influenced by the advent of crop circles, so the meteorological theory has implications for the professional integrity of meteorologists. If true, Meaden's theory asserts that an atmospheric phenomenon has existed since long before the dawn of meteorology as a science, yet it has somehow been totally missed. Furthermore, its existence requires a certain degree of rethinking about the possible behaviour of wind-flow in boundary-level meteorology. Perhaps unsurprisingly then, most published comments by professional meteorologists have been at best non-committal. For example, after Meaden published a brief discussion of his theory in Weather, the journal of the Royal Meteorological Society ("Formation"), the letters in reply were generally dismissive (Brown; Pike). This is not to say that there is no support for Meaden's theory, rather that the support appears to be mostly limited to precisely those meteorologists who are actively promoting the theory. So, for example, Fuller gives a list of of meteorologists who support the theory in Crop Watcher 1 (27-28). Of these 13 it is notable that two work closely with Meaden in TORRO and another six gave papers at the TORRO conference in June, 1990 on the circles effect. The other five appear to have no great connection with Meaden: one of them is retired and another is Heinz Wolf, a famous media personality in the UK. The rest of the list consists of 16 meteorologists who are either unsure (12) or regard themselves as unqualified to pass judgement (4). Fuller lists only three who flatly reject the theory; however one of them is Paul Mason an acknowledged expert on air-flow over obstacles, whose analysis of the flow structure around a hill Meaden uses as theoretical background.

This appears to be a similar process to that which Iton Westrum demonstrates in his analysis of the scientific disbelief in the existence of meteorites in the nineteenth century and this may well be characteristic behaviour ("Science"). Also the reluctance among meteorologists to accept the plasma vortex has undoubtedly been exacerbated by Terence Meaden's somewhat

marginal position in the meteorological community.

3.1.4 Beyond the vortex

So far I have looked at the impact of Meaden's explanation on two groups of individuals for whom it has certain ramifications if true; if crop circles are caused by natural atmospheric vortices farmers can look forward to continuing crop losses and some meteorologists are going to have very red faces.

Now, in considering those people for whom the theory is less important, it becomes necessary to widen the scope of inquiry slightly. The interview on page 114 gives some idea of the general unwillingness of individuals to commit themselves to this particular theory, and it should be noted that it is not Meaden's theory per se that is at issue, but a meteorological explanation in the more general sense. Even with this formulation I found very few people who were willing to support such a concept and, if anything, this theory appears to be losing credence, as the following example shows.

Interview Talking with a barmaid, (TR), in a pub in London in January, 1991. I had a copy of The Crop Circle Enigma with me which initially attracted her interest. After telling her what I was doing and letting her look through the colour photographs, which do tend to concentrate on the more exotic formations, I asked her for her opinions. Italics indicate emphasis.

BM Anyway what do you reckon causes them?

TR I don't know. I used to think they were all made up or whirlwinds. But they're so precise. I don't see how a whirlwind could do that. ((looking at the "swastika" formation on the front cover of the book)) I mean, I don't know. Maybe they are aliens. I expect they're trying to confuse us or they've got a deal with the Sunday Sport³⁶ (Lugdis)).

BM You mean you think maybe it is something to do with aliens?

TR. Oh I don't know. You tell me!

3.1.5 Beyond meteorology

If one does not accept a meteorological explanation it may still be the case that one explains the phenomenon in terms of some kind of, as yet unexplained, scientifically knowable process. For example, the two interviews below demonstrate a certain degree of faith amongst the general populace that science will one day explain the crop circles.

Interview in a bar in Sheffield. I talked with a man (Inf) in his early 30s who worked as a labourer just before the Bratton hoax.

BM I'm interested in crop circles and what causes them.

Inf Oh yes. What do they say about them?

BM Depends on who you ask...

Inf There is a perfectly natural explanation you know.

BM Yes?

Inf Definitely, There always is.

³⁵ A weekly tabloid paper that specializes in sensational stories.

RM Oh?

Inf Like in the Bible the time when the Jews escaped from the Egyptians when Moses parted the Red Sea. Have you heard about that?

BM I, um. I read the story in the Bible.

Inf Yeah well science can explain that!

BM It can?

Inf You see they were leaving at the start of the rainy season and over there there's all these reeds in the seas. OK?

BM Yeah.

Inf All these revels they collect water and can hold millions of gallons of it. During the dry season you see all the sea beds are dry so people can go across through paths in the reeds but when it starts to rain all the reeds collect water. So when the Jews went across the water was still all trapped in the reeds 'cause they timed it right. But when the Egyptians went across it rained some more and all the reeds 'couldn't hold the water anymore so it all flooded out and drowned them. So it says that Moses parted the waves but really he was just smart and there was nothing magic about it.

BM Oh right. I hadn't heard that before.

Inf It shows you doesn't it. It shows you that there's always a reason. Those circles will be just like that. You just have to know what you're looking for. It's like the pyramids.

BM The pyramids?36

The man continued to explain that the Egyptian pyramids were built to act like freezers and also tackled two miracles from the New Testament in a similar manner. This was all conveved in an earnest and enthusiastic style.

³⁶From field notes. I tried to get permission to tape these theories but the informant was not amenable. Due to the length of the various expositions I concentrated purely on getting the sense of his argument and the order in which he presented in

Although the above is a somewhat problematic example it does show that, for this individual, there is faith that there will be a scientific explanation for the crop circles, even if it has nothing to do with whirlwinds.37 The following talk with a proprietor of a second-hand book shop in a small village in the West of England shows a similar belief.

Interview. The woman !Wol was in her 50s and had run the book store for a long time. I had just purchased a cheap book about UFOs when she proceeded to tell me of an encounter she had once had with a UFO. (February 1991).

Wo ((looking at UFO book)) Have you seen one of them?

BM No. Have you?

Wo Yes, I have in fact.

BM Oh. Right.

Wo I saw something I didn't understand in the sky. BM Yeah Well that's a UFO in the strictest sense

Wo I wouldn't call it a flying saucer but it was definitely a UFO.

BM Isn't that always the way!

And I was alone at the time so. ((Narrative description of UFO deleted.))

Wo I suppose they [UFOs] must be supernatural because no one knows what causes them.

BM Yeah. I'm actually interested in crop circles, the circular formations in corn fields. Some people think there's a UFO connection.

³⁷Cf, the quote, above, on page 138

- Wo Yeah?
- BM I don't know myself. What do you think causes them?
- Wo They can't all be hoaxes though, I think some of them were people jumping on the bandwagon. Maybe some of them could be caused by chemicals in the soil. But they've been around for centuries haven't they?
- BM They do seem to have been around a long while. ((Pause))
- Wo I think the scientific answer is that whirlwinds cause them. But there are lots of theories aren't there?
- BM Yeah there certainly are. Whirlwinds, UFOs, mating hedgehogs ((both laugh)). Apparently when hedgehogs mate they chase each other round in circles in corn fields.
- Wo They would leave a trail though wouldn't they. You would expect to be able to see how they went into the field.
- BM Yeah. I suppose you would be able to see hedgehog trails.
 I guess that's it for the hedgehogs!
- Wo I suppose no one really knows. If they're supernatural it just means we don't know how to describe them. In the past people used electricity and magnetism without knowing how it worked. That was supernatural. So I suppose they have to be supernatural.

This represents a sophisticated process of reasoning. The woman is able to demonstrate that she is aware of the difference between UFOs and their interpretation. She is able to use evidence (the long-term existence of crop circles) to rule out the explanation that all crop circles are hoaxes. She is similarly able to take the joke (hedgehog) explanation and use evidence (the lack of trails) to disprove it. Again she does not commit herself to the meteorological theory as such (describing whirlwinds as the "scientific theory"), but argues that science has explained electricity and magnetism

and that therefore one can expect it to explain crop circles. For the moment though, they remain unexplained and are therefore, to her, supernatural.

3.2 The Cereological Explanation

The basic premise of the "cereological" seplanation is that there is some type of non-human intelligence that is responsible, either directly or indirectly, for the formation of crop circles. It is the nearest in type to Gillian Bennett's concept of a supernaturalist philosophy (Traditions). This definition is purposefully encompassing because there are many circles researchers who feel that their work falls into the same camp about whom this is the strongest statement one can give about their common beliefs. Unlike the meteorological explanation, which is centered around one man's theory, and the hoax explanation, which is based around the single premise of human complicity, the cereological explanation is more of an umbrella, covering all those who believe, as Colin Andrews has said, that "it would be a mistake to get too conventional" in the explanation of this phenomenon. 39

³⁶This term has been used to describe both Terence Meeden and Colin Andrews at different times. Here I use it solely in terms of the definition given above. It comes from the goddess of the corn, Ceres, and was used as the name for the house journal of the CCCS, hence my use of it here. Reently, as of issue there, The Cereologist has undergone a name change to The Cereologist and is now no longer the house journal for the CCCS. Also Terence Meeden's research group, The Circles Effect. Research Unit is known by the acronym, CERES: a remnant, perhaps, of a golden age in circles research when the researchers were few in number but still fliendly with each other.

³⁹Colin Andrews. Interview, BBC Radio 2, air date unknown.

3.2.1 Explaining cereology

As stated above, there is no one cereological explanation for the crop circles phenomenon. Indeed, some researchers, most notably John Michell, and appear to believe that even the attempt to try to explain is to misunderstand the phenomenon. This truly sceptical viewpoint is a small minority within the cereologists but it does give an idea of just how broad the school of thought is.

Probably the most valiant attempt at synthesizing the cereological position comes in George Wingfield's contribution to the CCCS anthology, "Beyond the Current Paradigms". In this, he gives a sketch of the various relationships between the facets of cereological research: drawing oppositions between the physical and metaphysical schools of thought, and oppositions between "sky mysteries", such as UFOs, and "earth mysteries", such as dowsing (101-102). According to Wingfield, "the whole subject of the crop circle phenomenon is only explicable if we attempt a solution which involves a synthesis of these different aspects" (101). This is not to say that he accepts any part of the meteorological explanation, for he clearly does not, but that

^{4&}quot;Michell, "Down Among the Explainers." For example:

This world was made as our natural paradise, and no further explanation is needed for everyone to enjoy it.

And:

The Oracle named Socrates as the wisest of men because he, alone of all philosophers, realised that nothing in this world can be explained.

he thinks conventional science can provide useful insights into solving the mystery. According to Wingfield, the crop circles phenomenon cannot be explained without reference to 'unconventional' science.

This gives an idea of the sophisticated nature of the cereological school of thought. The researcher's beliefs have evolved from initial puzzlement to a detailed and rationally constructed set of theories. Wingfield's article is an attempt to define the nature and objectives of the field, to set up a cereological paradigm, and Michael Chorost takes this further. He applies Kuhn's theory of revolutionary change in scientific theory to the current state of affairs in cereological research ("Thesis"). Chorost's position is that cereology is as yet an "immature" science and that researchers should bear this in mind when carrying out fieldwork or theorizing. This is an important finding and I will return to its ramifications in the final chapter of this thesis when I attempt to apply Kuhn's paradigm theory to the various crop circle explanations.

In the rest of this section I shall sketch the ways in which cereologists attempt to explain various features of the circles phenomenon. I shall start with the version of the explanation being expounded by the researchers before considering the versions of the cereological explanation that are held by others whose lives are less involved with the circles phenomenon.

3.2.2 Cereological analysis

The cereologists are somewhat more dispersed than the meteorologists, consequently there is no one cereological explanation. In this section I follow Wingfield in considering various different sets of researchers, such as Richard Andrews and the dowsers, Delgado and Andrews, with their interest in forcefields and UFOs, John Haddington, with his belief in fairies and symbolism, and many others as being facets of the same overall school. Each of these tends to concentrate on slightly different features of the circles phenomenon and I will use theories from all of them.

The internal complexity of circles

The most detailed analysis of the internal structure of the circles has been published by Delgado and Andrews. In Circular Evidence they spend nearly thirty pages discussing the various different features of crop circles. To them the circles are the evidence, the physical remnants of the agency that created them. Thus they are concerned to demonstrate the complex and confusing nature of the various features, such as lay patterns.

What kind of a force can produce a variation of lays in one circle? If you are not confused yet, then perhaps this description of braided or plaited lays will help to make you so. (127)

This is not to say that the authors regard themselves as incapable of under-

standing how the circles are created, indeed Colin Andrews has said precisely the opposite frequently in interviews.⁴¹

The crux of Delgado's and Andrews' work was to demonstrate that normal science cannot explain crop circle formation and thus they gathered evidence to prove their point. So, for example, they say:

Lays are important because, by studying them, investigators realise that they are looking at the results of a force that has no known scientific explanation. (126)

Consequently the authors' attempt to elicit only the general nature of the agent that creates the crop circles. In this respect their analysis so far is only slightly divergent from the meteorological one. They, however, are reluctant to espouse a natural, uncontrolled phenomenon and feel that the evidence points in a different direction.

We have to look for a force that takes place independent of ground contact. This means we may be looking for an unrecognized force that is already in existence in some places but requires control and manipulation; or perhaps a transportable force used at will by some controlling power. Both ideas suggest an intelligence wanting to produce these manifestations for some unknown reason. (168)

[&]quot;For example the following quote from an interview on BBC Radio 2 in the summer of 1990. The precise air date is unknown.

Interviewer Now are you any nearer to an explanation of, of uh... what causes them? Andrews We are, yes we are, we are getting closer. Uh we know now an awful lot more than we did a white ago, we know a lot more than we did when the book came out.

Delgado's and Andrews' theories appear to be the most technologically based of all the cereologists. Although they concede that the circles effect may be a pre-existing natural phenomenon they still appear to believe that some degree of technological control must be required to direct it. Other cereologists are less sure. Wingfield appears unwilling to be drawn on the subject. Others such as Ralph Noyes, and Archie Roy appear to be suspending judgement. Some, like John Haddington, reject any technological basis in favour of entities such as fairies. Finally there is the work of Richard Andrews, of which it is useful to give a brief synopsis here.

Richard Andrews is an ex-farm manager and has practised the art of dowsing for over 14 years. He has become the pre-eminent authority on dowsing crop circles. In his paper, in the CCCS anthology, he gives an overview of the various dowsing phenomena associated with circle formations. His basic argument is that the surface of the earth is criss-crossed by a grid-like pattern of energy lines. These lines can be mapped out by an experienced dowser with the use of an instrument that is sensitive to the energies that can pass along the lines. Where the lines cross ("nodal points") vortices of energy are formed, and with the seasonal cycle these vortices can gain and lose energy, creating a cone of influence that may stretch up to 100m into the air. These vortices are the blueprints for circle formations and can be dowsed at anytime. Occasionally, a triggering of event occurs which energizes the vortex to such an extent that it releases its charge and thereby forms a crop

circle. Thus any crop circle is formed by the interaction of two events: a pre-existing energy pattern and some sudden input of energy.⁴²

Andrews' theory is notable in that it postulates a circles effect that requires neither technological manipulation nor, necessarily, does it need some kind of controlling intelligence. The latter is probably the most controversial of its aspects and Andrews is somewhat coy as to his beliefs on the matter. ⁴³ These considerations appear to be why Wingfield states that the dowsing, "earth mysteries", results form only part of the answer:

...to fully understand what actually occurs, we need to consider both the Earth Mysteries and sky mysteries, which are but different aspects of the same thing. ("Ever Increasing Circles" 29)

Placement of crop circles

The issue of how the circles locate themselves is generally taken as basic proof of an operating intelligence. There are various aspects to this theory of intelligent location. Firstly it is argued that circles rarely, if ever, straddle hedgerows and thus are always completely formed. 44 Given the number of

⁴²This account of Richard Andrew's explanation is taken from his article, "The Living Countryinde" and a talk he gave to the British Society for Dowing an September 19, 1990.
⁴³When questioned after his lecture to the British Society for Dowing, Andrews retimed to be drawn and when asked if he saw the possibility for some kind of controlling intelligence behind the circle formations he answered, "that has to be pure speculation for now."

⁴⁴There do seem to be contrary cases. One is given in Delgado and Andrews, Circular Escidence 23. See also Paul Fuller's comments in The Crop Watcher 5 (1991): 4-5, where he claims that at least 3 circle formations have crossed hedgerows. His comments are in response to Noye's analysis of circle formations that cross hedgerows, The Cereslogist 3 (1991): 4.

circles that have appeared, and their size compared to the fields in which they appear, it is argued that this cannot be explained by chance alone. And so Wingfield says:

...it is, is anything but random, um, these wonderful pictograms, they don't just sort of fall out of the sky and come plouk down across a hedge or anything like that, no, they're very carefully positioned. (Tape-recorded interview, Sept. 1990, rev. 173–176, side 2)

Secondly, within fields formations have a tendency to align themselves with tractor-lines or other linear ground features with a frequency that seems to defy the laws of probability ("Beyond" 100). This is especially true of the pictogram formations.

Thirdly, circle formations appear to congregate at sites around ancient monuments. Withhire is famous for ancient sites, such as Stonchenge and Avebury, many of which are based on circular designs. Cereologists, and others, believe that this is just too much of a coincidence. For example, the wonderful photograph in The Latest Endence of a circle and ring formation at Farley Mount in 1990 shows how the formation seems almost to imitate the construction on an adjacent Bronze Age Barrow (Delgado and Andrews 61). Furthermore, there often seems to be a correlation between the linear direction of the pictograms and ancient sites (60).

The final aspect of this phenomenon of intelligent location is the predilection of the circle formations for the Wessex area. In 1989-1990, although the circles were said to have "burst out" of the area into the country at large, the pictograms supposedly all occurred within the Wessex area; Delgado and Andrews present a map showing the clustering of the pictograms in two main areas. In the light of all these observations most cereologists appear to accept that the circles are deliberately being formed in certain places and that this provides one of the keys to the mystery. In

Evolution of crop circles

This is probably the single most important argument that cereologists have proposed against any kind of natural phenomenon. The premise is that the circles have evolved in complexity and in terms of their movement out of Wessex. As Pat Delgado says: "Evolution — therein lies all the answers. It is at work everywhere." (Latest Evidence 80) This perception leads George Wingfield to assert that:

The 'plasma vortex', if it exists, would have to be endowed with almost magical properties, including some sort of evolutionary process, if it is to explain all the characteristics of the circles. ("Beyond" 100)

Crop circles interact with people

A final line of argument to note for now, is that many cereologists see an interaction between the researchers and the circles: the 'Puckish' tendency

¹⁵ The Latest Evidence 76. The claim is, of course, disputed. A pictogram from Bulkworthy in Devon is shown in the Crop Watcher (Cooper, "Bulkworthy"). Of course this might not be a 'genuine' pictogram.

¹⁰Chorost reports on the 'spatial relation' of circle formation and details a research effort that is being pursued on this topic ("Thesis").

noted in the first chapter. For example, in the first edition of *The Circles Effect*, Terence Meaden claimed that the fact that in ringed circles the ring always rotated in an opposite direction to the main circle was strong evidence for a natural, atmospheric origin to the crop circles. Then, literally days after the book was published, a crop circle was found which had a ring that rotated in the same direction as the main circle, and this discovery was reported with no little glee by many cereologists. This is but one instance in which cereologists feel that the structure and becation of the circles is intended to be deliberately provocative. So for example, Patrick Harpur draws analogies between Mercurius, the messenger of the Gods, and the circle formations.

His handiwork can be discerned in crop circles which tease us into pursuing him while he maddens us by remaining just out of reach. ("Mercurius" 11)

Not only are the circles thought to be clusive and contrary but they are also held to be responsive to wishes. The most farmous example of this is given to have occurred when Busty Taylor wished out loud, whilst flying his plane, that a "Celtic Cross" would appear as a circle formation. A few days later, he was astonished to find just such a formation in a crop field below him as he flew over.⁴⁸

In both cases, cereologists claim that there has been an interaction between the agent responsible for creating the circles and the attempts of the

⁴⁷See for example, Noyes, "Introduction" 26-27.

⁴⁸Reported in, Delgado and Andrews, Circular Evidence 45; Michell, "What Mean these Marks?" 46. The Celtic cross shape is shown later in this thesis: see figure 4.1 on page 242.

researchers to unravel the mystery. Again, this illustrates the apparently intelligent nature of the controlling agent of the circles effect. Perhaps the most dramatic example of this comes from the events that surrounded "Operation White Grow" in 1989.

Operation White Crow.

"Operation White Crow" was set up in the summer of 1989 with the avowed attention of trying to capture the formation of a crop circle on video. For over a week, Pat Delgado, Colin Andrews, and many others monitored the Punchbowl at Cheesefoot Head with video equipment. Disappointingly, no circles formed in the chosen locale during the period, but one was found in an adjoining field the morning after the experiment was concluded. This was taken, by many, to indicate the "impish sense of humour" (Wingfield, "Ever" 19) of the circle-makers. What was rot immediately told were the events that culminated in the discovery of this circle.

The events surrounding the discovery have now been recounted in several places. Briefly, it seems that the observers received a letter in the post addressed to Colin Andrews and marked urgent. Upon opening it they found that the envelope contained two pages of childishly written verse from an anonymous author. This verse hinted that on the Seturday night the

⁴⁹Beaumont, "More Circular Evidence" 27; Delgado and Andrews, Latest Evidence 11-13; Wingfield, "Beyond the Current Paradigms" 104-105, 110, "Ever Increasing Circles" 18-25.

investigators should go to a nearby circle and "Listen hard for every sound,"
(Wingfield, "Beyond" 140). Despite believing that it was probably a hoax,
six of the investigators went to sit in the circle. What exactly happens next
appears to be a matter for some debates as interpretations by the participants
differ in detail, if not overall sequence, and here I leave George Wingfield to
tell his story.

Wingfield's account of an anomalous encounter during Operation
White Crow. This comes from a tape-recorded interview in September
1990. At this point most of this information was known only to the participants in the event. The participants in the interview are George Wingfield.

GW, and the author, BM.

GW Last year at uh Cheesefoot Head uh we had a project called Operation White Crow. Have you hard of heard of this?

BM Yezh. I I sort of I read a few reports on that

GW ((hunts for cigarettes for a while)) Um ((lighting cigarette)) As as you know we we had um a watch with a lot of high tech equipment, cameras, and infra-red equipment and so on rather similar to Blackbird but um

slightly more primitive which went out for 8 days and the cameras were trained on the Punchbowl, Cheesefoot Head which is

a very good circle forming place. Of course this was the one year in which the circles didn't form in the Punchbowl. You could um draw some conclusions to that you might say that they didn't form cause it was being watched

or you could say it was because there was a crop of peas in the Punchbowl which are not a good medium for circle forming, and um I'm not aware of any circles have ever formed in peas, it's possible they have I haven't heard of it. Um at the end of the watch ((pause whilst lights cigarette))

I persuaded six of those present

to go and sit in a large circle which had formed three weeks earlier, up at the top on the Longwood Estate on the um on the right hand side of the road as you go up the hill.

BM Yeah

GW I'm sure you that you know

BM Yeah

GW The side uh in fact in the field opposite the car park, you know the car park

on the other side, and ((long pause - lights cigarette))
we went up there at about twelve-thirty at night

the six of us sat in the circle. We were accompanied by a well-known medium

which uh was something I thought was extremely important

I think this this was very significant given the nature of the the thing, and after about um

after about 20 minutes or so, uh an extraordinary noise, have you heard this?

BM No I haven't, I haven't heard this before

GW Uh the noise, which I've got on tape um

have to see if I can find it play it to you um was a very high-pitched trilling noise, not uh not terribly loud as such but very, very

uh intense and penetrating

and it started up initially um almost as if it started up in the circle in the immediate vicinity. We all, sort of looked around at each other and realised that all six of us could hear this. And, it then distanced itself from us, it uh it was down the field, about 50 yards down the field and, it moved around it moved around, here it was

first of all it was that way then it was this way.

BM It was a like a little localized point or something?

GW nh

the

it seemed to be like that. There was nothing visible whatever um

there was a full moon that night, or nearly a full moon, it was just it was just past full, um and we could see perfectly clearly in every direction. All we could see was the barley in the field and uh the hedges and see the road which is not too far away. And um this moved around

rather like a shy animal and

it seemed

wary of us ((...)) is the only way you could describe it

after a time uh we had a medium Rita Gould was with us, and she tried to talk to whatever this was. Uh talking to a noise is rather...

BM Yeah!

GW Is an odd procedure as you can imagine, but very gradually it came closer and closer. ((long pause. Takes a couple of puffs of cigarette.))

After a time it came right up to the circle where we were. It, was as near as near to me as um my dog over there [about five feet away, sitting on a nearby chair] and we sat in the circle. This thing, had a peculiar effect on on one's head, it seemed almost hypnotic and

uh I think all of us felt this, almost hypnotized state, from this high high-pitched trilling noise, it sounded, it's very difficult to describe but ah I'll see if I can find the tape...

BM Yeah, it would be interesting to hear that.

GW Um I forget where I've put it but I've got it somewhere. It sounded a bit like a sort of chattering noise um it had almost an insect-like quality and the the only thing it can be really compared with is a very loud cricket.

BM Yeah

GW Tropical tropical cricket or ((...)) or something of that kind.

And it sort of varied slightly uh in its pitch

and

the medium spoke to it, tried to lure it towards us, and said "If you understand us: stopped for a few seconds otherwise it was it was continuous. Um and it as I say it came it right up to us, and it then seemed to, almost encompass you us.

by being round on both sides, whether there was a single source or whether there were multiple sources, very hard to tell. Impossible to tell, there was nothing visible. And um at one stage in the proceedings uh I got up I went as none of us could got up while we were sitting I went to the edge of the circle, none of us ventured into the standing corn and I said, "Please. Will you make us a circle." Sounding slightly foolish addressing ah an empty cornfield but um what actually what what amazed me and all of others was that none of us was in the slightest bit scared of this, there was no...

BM Yes, I was I was going to ask you about about that

GW No feeling of, no feeling of anything hostile or unpleasant and uh I kept thinking "Why aren't you running, like fury in the other direction." Because here is something totally unknown

I hesitate to say alien but totally

uh...

BM It's certainly unusual ...

GW Unexpected, strange, unusual and whether or not my request was um uh understood, the next morning there was about four hundred yards away in the directic

about four hundred yards away in the direction in which this noise went off, there was a new circle a very large circle with a ring around it. Just exactly where it had gone. This noise went on for three hours, it moved about. When it had come to its closest to us, three other people who weren't, who we handn't actually invited along came up and into the circle, they'd heard it from the road, and um, I think due to their arrival, whatever this was withdrew and it went away down the field. And the moment was obviously past, the moment of closest contact and

um Rita, who's a medium and Pat Delgado said "Riight. Well we must go now. That's it, it's finished." And, we all went back down to the observation vehicle which is about quarter of a mile away. We were quite amazed to find that an hour and a half had elassed

which we found absolutely staggering all six of us said well that's impossible and it seemed to have been about half an hour

and it was as if we'd had a missing time experience. I hesitate to use that that's the thing you get in connection with UFO phenomena, but, we were totally amazed that it was an hour and a half after, the time this thing had started.

BM Right. Enthralled by the thing while it was there.

GW Abs, well I suppose we were totally enthralled by it yes. Utterly enthralled and um as I say in almost a hypnotic state. Anyway we went back down, we had a had a coffee talked about

in total amazement, and Rita and her husband, who was also there, um drove off back to Leicester where, where she lives. And after about an hour I was sort of regaining my senses and confidence and everything else

I said to Colin Andrews I said "For God's sake, that thing is still out there. Let's go and find it." So the two of us accompanied by a third person called Robin Jones, uh got into his car and drove back up, and

drove into the field up to, as close as we could get to the circle

wound down the window and I I could still here it, right down the field. So, this was where we got the tape recording, I got the tape recorder out of the car and um I lead the way and uh we went walked off through the corn to, along the tramlines, to in the direction of where this was. And yet we could never, get to it. We got quite close to it, it seemed to be about ten yards or twenty yards ahead and we walked on and on and it seemed to be leading us, uh

almost as if it was leading us in a particular direction. And we went very slowly through the corn listening, and making the tape recording and uh

eventually we said well this is ridiculous, it's getting light it was you know it gets light half past four, and it was after four o clock and uh the three of us said right well, lets leave it, leave it here see if it's still here when it's light, and I just wish we hadn't because, uh

if we had continued in that direction which it was leading us, it did seem to be leading us, uh we would've undoubtedly come to that circle. Which I can't help thinking, it wasn't there the night before, I can't help thinking that this, caused the circle.

This lengthy memorate gives just about the best indication of why the cereologists are adamant about the existence of some controlling evidence behind the circles phenomenon. It is not an abstract desire or need that motivates their beliefs, but concrete evidence and personal experience. Where meteorologists have used analogies with other meteorological phenomena and the testimony of eye-witnesses, cereologists point to anomalous phenomena as invalidating a natural explanation. Thus their interest is in events such as equipment failure within circles; the trilling noise referred to above and also experienced on several other occasions; flashes and discharges of energy

⁶¹I would like to express my gratitude to George Wingfield for sharing this extraordinary account with me. Given the nature of the circles discourse he is opening himself to ridicule by presenting such a frank account of the events. I have every reason to believe that this was an honest and sincere recounting of the events as he experienced them.

from within circles; the effects of dowsing within circles; strange markings on film-negatives; the alteration within individual circles over time. All of this comprises part of the set of evidence that cereologists use to justify and prove their theories.

3.2.3 Interpreting the circles

The above should have given an idea of how cereologists explained the advent and nature of the circles. Cereologists, unlike meteorologists, do not appear to place great importance on trying to deduce how exactly the circles are formed. Their explanation in fact forces them to acknowledge that this is currently unknown and may remain so. Consequently, the thrust of cereological research has become a quest to deduce the meaning of the circles. As Richard Andrews states:

We are nowhere near an answer, because the answer may never be found. But we are at the beginning of one of the most exciting times for man, I think. And this will be the first indicator that we have of the massive change that's going on.³¹

Symbolism and communication

In attempting to define the field of cereology Michael Chorost says, that if one is to assume that the circles are created by a controlling intelligence then:

⁵¹Richard Andrews, "Dowsing the Corn Circles." Tape recorded lecture given to the British Society of Dowsers, London, Sept. 1990. Rev. 139-142 side 2

Discussion only becomes possible when one hypothesizes that the formations are supposed to mean something, either to their creators or to ourselves. ("Thesis")

If this is the case, then research has to be applied to the interpretation of the circles as some sort of code, through examining the structure of the formations, and their placement in relation to each other or to some other factor, such as ancient sites. Chorost explicitly rejects the use of human alphabets and symbols as the basis for decoding the symbols, but this activity has become increasingly common amongst circles researchers. For example, John Erik Beckiord attempts to apply his knowledge of various ancient languages to decode a pictogram found in Barn Field near Winchester and comes up with, "this is a dangerous place to camp". 52 Other researchers have focused on the similarities between some of the circle formations and certain sacred symbols. The most complete example of this is Michael Green's attempt to find correlations between ancient Romano-Celtic carvings and various circles ("Rings"). Other notable attempts have been Michell's analysis of an Essex formation as the mark of the Goddess, Ceres, herself ("Sacred"), and the analysis of the Winterbourne Stoke 'swastika' as the Celtic symbol for 'great change' and ancient wisdom.53

⁵²Beckjord, "Having a Go". Beckjord has also privately published a paper giving a detailed analysis of various pictograms.

⁵³See for example, Green, "Rings" 145; Haddington, "Between" 175.

The interest in interpretation has begun to affect the larger populace, possibly partly inspired by an article in the Today newspaper. In the prepared on the theorem of the Alton Barnes pictogram, According to Charles d'Oban, an expert in ancient Sumerian, the pictogram was a drought warning, literally meaning something along the lines of "multiply your wells". In the same article, the paper's resident weatherman, Philip Erden, noted that the Alton Barnes formation appeared to be constructed of various weather symbols.

This move appears to be being picked up in other contexts as well. For example, the cartoon in figure 3.1 appeared in the Today newspaper the day after the Bratton hoax. The text of the cartoon refers to "Beadle's About", a British TV show in which the host, Jereny Beadle, plays practical jokes on unsuspecting individuals. In the cartoon, the circle formation is interpreted as a practical joke performed by aliens from the "Planet Beadle".

A similar example can be found in the advertisements for "Reese Peanut Butter Cups." Coincidentally, the company who manufactures these, Hersheys, is famous for its involvement with the film "E.T." in which the alien frequently eats "Reece's Pieces". In one of a series of four advertisements, a circles researcher, named "Rory Tate", explains to an interviewer that he has used ancient Egyptian hieroglyphs to decipher the meaning of crop cir-

⁵⁴ Nelson, "Prepare to Meet The Drought" Today 20 Jul. 1990: 6.

⁵⁵Apparently there was no direct link between the use of "E.T." to sell "Recces Pieces" and the choice of the "mysterious circles" advertising campaign. My thanks to Lijana Polensek of Rershey's Canada for this information.



Figure 3.1: Cartoon: scientists decipher the crop circles

The cartoon shows circles researchers finally interpreting the message of the hoax circle at Bratton. The message is, of course, that the formation is a practical joke pulled by an alien prankster from the planet 'Beadle' (Today 27 Jul. 1990: 26).

cles. They can, he says, be decoded as, "real milk chocolate, and peanut butter" — the constituents of "Reese Peanut Butter Cups". In this case, the interest in interpretation has been picked up by an advertising firm who uses it, humorously, to market a product.

The UFO connection

The growing interest in the symbolic nature of the circles phenomenon has had a very dramatic impact on ufological research and the Extra-Terrestrial Hypothesis (ETH) in particular. I have already discussed the methods by which researchers such as Randles and Fuller have attacked the ETH, and the concept of circles as communication has caused a similar crisis of confidence in the ETH, especially in Britain which remains the focus of interest in the crop circles phenomenon. Michell says,

Extra-terrestrialism is thoroughly out of fashion among British ufologists — unlike in America, Russia and most other countries where the link between UFOs and space beings is rarely questioned. ("Down Among the Explainers")

He continues to assert that this is not the case amongst circles researchers and here I disagree with him. There definitely are those who feel that circles are caused by solid alien spacecraft, and Michell quotes a communication from the Rev. Anthony C. Pike from the Saints of God Church in Harrow:

"Shalom! Greetings in the Name of our Lord Jesus Christ. This is just a note to say that the Wiltshire cornfield circles are caused by alien spacecraft.

Pike, however, could not be said to be a senior circles researcher and I think most of those who accept the cereological explanation, with the possible exception of Pat Delgado, would agree with Wingfield's comments that:

GW Ok. um, UFO, UFOs have been with us, for a time and I'm not suggesting and ah a lot of people are not suggesting that they're

solid alien spacecraft this is, this particular sort of UFO I'm talking about is, certainly not a solid alien spacecraft. It generates a ball of light of some description which, uh may come down from the sky, or it may be a, initially perceived at ground level, and move around in a very peculiar manner and have rather strange effect on people, um

there's plenty plenty of this in the literature, uh, it's called a you-eff, always used to be called a UFO for want of a better name, uh, it doesn't

say what it is uh, we shouldn't presuppose what it is uh, little green men and, spacecraft and spaceships are are the province of Hollywood and Pleet Street, I mean that's a different matter altogether and uh I see no reason to attach, that sort of thing to what we're looking at.⁵⁶

While this interpretation does not rule out the possibility that UPOs are of an extra-terrestrial origin, it does characterize them in quite a different manner from traditional ufology. It becomes meaningless, for example, to look for crashed alien spaceships because the nature of UFOs has been changed, and this is as big a challenge to the prevailing formulation of the ETH as anything said by Jenny Randles and Paul Puller or Terence Meaden.

3.2.4 Who believes in cereology?

The preceding section has given an overview of the formulation of the cereological explanation amongst circles researchers. As with the meteorological theory, much of the above is esoteric knowledge and is not widely available to the general public. Consequently, it is not surprising that the cereological explanation as it exists without the small, tightly-knit community of circles researchers takes on something of a different aspect.

Farmers. Those whose livelihoods are most affected by the phenomenon seem to be the least ready to accept any kind of supernatural explanation.

⁵⁶ Tape-recorded interview, Sept. 1990. Rev. 315-330, side 1. See also Richard Beaumont's interview of Colin Andrews: Beaumont, "More Circular Evidence".

Fuller's 1987 survey, discussed, above showed this clearly. That is not to say that there are no farmers who hold this view. Although I did not find anyone willing to express such an opinion, they do exist. For example, one farmer whilst never stating an actual opinion when interviewed by a reporter from a local newspaper said:

It appeared on a virtually wind-free night so I don't go along with the weather theory and I discount hoaxers because of the extremely large number of shapes which are appearing. (Western Daily Press 20 Jul. 1990: 3)

Circle tourists. There is, however, a whole category of people, that one could term "circles tourists", who overwhelmingly support a cereological explanation. These people are those who have travelled to visit a circle. This does not include those who have had a circle form in the vicinity of their homes or work-places. Naturally it follows that people who travel to circles are likely to do so because they find them interesting, for it takes some effort to track down and visit a circle and, at the height of last summer, one had to pay farmers to visit the most photogenic formations. Hence my description of them as circles tourists.

Amongst the tourists were those who had deliberately travelled to a circle and those who had stopped on a journey to somewhere else, intrigued by what they saw. The former group tended towards the cereological explanation. For example the crop circle at Bickington (see the photograph on page 18) was the first to appear in Devon. A few days after its formation I went to do



Figure 3.2: A busy day in the circles

Circles became a massive tourist attraction in the summer of 1990, as the photograph shows. Tourists had to pay $\pounds 1$ each to enter the field, were instructed to walk along the tractor-lines to the formation and could buy hot-dogs and T-shirts from enterprising individuals camped outside the field. (Photograph \odot G. T. Meaden)

a survey and to try to determine whether or not it was a hoax. Whilst I was there two groups of people visited: a dowser and two companions, and a group of four students from a nearby agricultural college. The first group were most interested in the energy aspects of the circles, having read articles in the New-Age magazine Kindred Spirit.³⁷ As I seemed to know what I was doing, one of the women asked me what caused the circle. I replied that I did not know exactly but there was a strong chance that it could be a hoax, to which she responded "Oh, I hope not. That would be so sad. It feels right. It's so peaceful and calm in here. I really don't think it could have been made by humans." Shortly thereafter I tried to determine their views more formally.

Interview with a dowser. June 1990, I talked with a dowser (MG) and his two companions (MF) and (KT). The woman, KT, took no part in the conversation, preferring to sit in the middle of the circle and occasionally glance disapprovingly at the more materialistic of my questions.

BM Is this the first time you've been to a circle?

MG Yes. ((Others agree))

BM What do you think of it?

MF It's wonderful isn't it. Can't you feel how peaceful it is.

BM It's certainly relaxing.

MG You know I've no real talent for healing but I think the energies in here are very positive. Not so much the outer circles,

⁵⁷ Beaumont, "Crop Circles", "More Circular Evidence".

the energy is really chaotic and unfocused in those, but in here the energy is so directed and focused. It's amazing.

BM How do you reckon these were formed?

MG ((Shrugs)) Nobody knows.

MF I thought you were supposed to be the expert.

BM No one's an expert at this thing.

MG I read Circular Evidence and I really can't see how a whirth wind could have done this. I think the force has to come from the ground. I think it's sort of like a gift. Like souncone saying you've done so much harm to the world but look what it's still doing for you.

MF Yes. It says something about the way we farm too. I think the more we ruin the countryside with all these pesticides the more this is going to happen.

MG Yes I think that's right.

Although it is clear that none of these three were willing to come up with an explanation for the circles effect, other than noting that it comes from the ground, their allegiance to the concept of circles as communication, in this case a "gift", and therefore to a cereological basis is obvious. The second group were less willing to commit themselves. All four were young men who had heard of the formation at college, and had come to see it for themselves during a study break. As always seemed to be the case, they first asked me what I thought.

BM Hard to say. It could be a hoax. Have you heard about anyone at college who admits to doing it?

1 No. No one knows who did it. That's why we came out here.

BM Oh. What do you think then?

- 1 Fuck knows.
- 2 Heard tell it's whirlwinds.
- 3 Yeah. If you over-fertilize the barley will lodge.
- BM So you think it's whirlwinds then?
- ((Pausing, unwilling to commit themselves.))
- 1 Nah. No way. ((The rest seemed willing to let the driver act as spokesperson.))
- BM So what do you think then.
- 2 Don't know.

These two examples seem to embody the different ends of the spectrum of opinions that I discovered. People tended to vary between a total lack of opinion to strongly-held beliefs in the supernatural origin of the circles. I found no one there who believed them to be hoaxes after seeing them and no one who was willing to accept a meteorological explanation. An interesting article in *The Guardian*, in which various visitors to the Alton Barnes formation were interviewed, gives an idea of the range opinions encountered.

[Roy's] theory: "Energy — some kind of earth energy"...
Roland, described by his party as a bit on an expert on ancient sites, was striding about making sketches. "It's the way one shape leads to another," he muttered. "It leaves your mind kind of boggled. Colin Patrick, on holiday from Southend, was going on about how the patterns resembled North American designs — "or is it South American? Anyway those people were supposed to have some sixth sense that we've all lost.

Sitting in the centre of one circle...Jenny Eyre from Muir Woods in California said she was getting the same sort of feeling that she had got at Stonehenge.

"We went up in a plane yesterday and they looked so perfect from the air, you can't believe they weren't meant to be viewed that way." she said. "I get this feeling of incredible kindness here, as if the circles are meant to benefit the earth." (Jul., 1990; 3)

The reporter uses a humorous tone throughout the article and has obviously been selective in the material he used, but nonetheless the opinions of these circles tourists are perfectly plain.

The Revenge of ET

If the ETH appears to be under attack amongst circle researchers, of all types, then it is still alive and well amongst the general populace. Those who do see some type of supernatural origin to the circles tend to think in terms of UFOs. That is not to say that the idea of circles as communication does not exist, the interview below demonstrates that it does, but that, for many, the 'simple' idea of circles being caused by alien spaceships landing in fields is still the most prevalent.

Circles as communication. I had talked with AS, who is an optician, before so he knew of my interest in the circles.³⁸ In January 1991 I brought up the subject again in the presence of a mutual friend, 4S.

AS So then, found out the answer yet?

BM No. I still haven't decided. It's difficult to say.

AS Well it obviously isn't just UFOs landing in a field.

⁵⁸In an informal context and without noting what he said about crop circles.

- JS If it was they must have changed their engine designs this summer!
- AS I think it has to be symbolism. They're too perfect to be whirlwinds.
- BM You think something's trying to communicate?
- AS Why not? There's so much fucked up with this world it seems only natural that someone's trying to warn us. Trying to get through ((pause))

BM You

AS ((interrupting)) I think it's really exciting. I really think something's happening and we're part of it. You're really lucky. I would love to to be able to go to one and see what it's really like. It must be quite something.

It should be noted that not everyone holds the view that crop circles represent some sort of beneficient communication from a benign intelligence. For example, the Reverend Peter Saunt is probably not alone in his view, expressed in the Independent on Sunday:

We've had them three or four years running. It's actually done by an occult power, a spiritual force. It adds to the spiritual confusion in the country, contributing to the "Jesus was an ancient astronaut syndrome." (22 Jul. 1990: 25)

The two examples below give an idea of the range of belief in the ETH as applied to crop circles that I encountered whilst interviewing ordinary people who had never been to a crop circle and whose livelihoods were in no way affected by it.

Circles as alien spaceships. Interview with OE: June 1990. He is senior union official at a local factory which has strong military connections.

OE The circles. I've read a lot about them.

BM What do you think is responsible for them.

OE I don't know for sure, no one does as far as I know. Mind you I can take a good guess.

BM Yeah?

OE Well for a start they're really perfect, not like normal wind damage at all. I've seen pictures of them and it's like they're done by a machine. I've worked on lathes before and I can tell you there's nothing natural about those things. You need machines to make circles like those.

BM Oh right.

OE Yeah. And they've been around since at least the sixties and before that. I used to hear about them when I did my national service.

BM You did.

OE Yeah. There was a mate of mine stayed in and he used to say they got them all the time on Salisbury Plain. He went to invest gate one. It was like like the ones you see today. Sort of a big circle in the middle with four landing marks on the outside. He is referring to a quintuplet formation, He said it was perfect. Like something had landed and then gone straight back up again. Mind you no one never said anything. It wan't the sort of thing you were supposed to say else poople might start getting upset or blaming The Express 92

BM So you think it was something like a UFO did these.

OE Exactly! It has to be. All that stuff about helicopters and hedgehogs is all a joke.

BM Why do you suppose they land in fields? It seems kind of odd to me.

OE Who knows? They're aliens aren't they. Could be anything.

⁵⁹ Slang for the military forces.

In this case OE has clearly constructed a detailed explanation for the circle formations grounded on the premise that they are the results of solid, alien spacecraft landing in a field and taking off. He uses his own professional knowledge to justify his theory that only a technological item could create the circles and rules out other explanations accordingly. He only falters when it comes to the aliens' possible motivations for landing in the fields.

A similar structure can be seen in the argument of a video-store owner in the same West-Country town (IS) who also proposes alien spaceships as the fons ct origo of the circles in October 1990. This person was more diffident with his opinions and, although he is "interested in science-fiction", he gives the impression of coming to this conclusion reluctantly and only because he "can't see what else" could cause the circles.

IS Oh yes, the crop circles. I find them really interesting. What's the explanation for them then?

BM Hard to say. People have all kinds of different theories.

IS I know they're been around for a long time cause a lot of people think they're brand new don't they.

BM Yeah quite a lot do.

IS I'd love to know what's behind them. I've always been interested in science fiction.

BM What do you think?

IS I don't know. I reckon its gotta be alien spaceships though.

BM Oh. Why?

IS Can't see what else it would be. It certainly isn't natural.

The interview with IS seems to reflect the general opinion of those who propose a supernatural explanation for the circles. Generally they appear to have to come to their beliefs by a process of elimination. This is not so much different from many of the circles researchers.

Perhaps surprisingly, this material differs in many ways from that which I have come across from Americans and in Newfoundland. In Newfoundland, I have found that the vast majority of people are aware of the phenomenon despite the fact that, as far as I can tell, there never has been a crop circle in the province. Even the fungus responsible for fairy rings does not exist. Of those to whom I have talked, most seem to have strong beliefs about the alien origin of the crop circles. The example below gives an idea of this.

A Newfoundlander's belief in UFOs. In this case I had taken some of the photographs to be used in this thesis to be duplicated. Whilst doing so, a worker at the photographic laboratory (PS) commented on them and the following dialogue occurred. June, 1991.

PS They're those crop circles aren't they.

BM Uh, yeah.

PS I keep an eye out on that stuff.

BM They're fascinating aren't they?

PS What do you think? Do you think UFOs cause them?

BM It's hard to say. What about you?

PS I think so. You can't tell me that there's all those worlds out there and none of them have life on them. You would have to be really ignorant to think that. And some of them have to have life on them maybe just like us.

BM Yeah. There are a lot of stars out there.

PS We spend a lot of time looking for life so why shouldn't they do the same. They might come looking for us. It's only logical. Some people don't believe in evolution. They still believe that the world was created. That's religion so maybe that's different. But the evidence all points the other way. You can't ignore all that evidence. Some people do, but people will believe anything if they don't think about it.

BM I suppose if you haven't thought about something...

PS Yeah. You can't tell me that UFOs don't exist. I was in the airforce twelve years and everybody knows about flying saucers there.

BM Yeah?

PS ((Agrees)) I remember when they brought back one from Greenland a few years ago. There was a load of wreckage there and they brought some back to study. It was when a lot of their own planes crashed and they found this other stuff as well. So everyone knows about 1.

BM I hadn't heard that before.

PS Anyways it makes sense to me that there could be UFOs monitoring us. They're waiting for the right moment to tell us but at the moment they're just letting us see little bits, like crop circles, to make us ready. If they showed themselves now it would be a disaster. We're not ready vet.

In this case, the focus of the argument is not on the crop circles per se but the possibility for extra-terrestrial life and the motivations of the aliens. Time and time again I came across the same focal argument: 'there are so many worlds out there some of them have to have life.' Furthermore, this individual puts those who do not believe in the possibility of extra-terrestrial life into the same category as creationists, and labels them all as people who ignore the available evidence. Perhaps the clearest example I have of how the ETH is constructed and held amongst the general public comes from an American woman visiting England. I talked with her on a train as she travelled to meet relatives and it transpired that she had once lived in the south of England for a few years in the late-1970s but had never heard of crop circles until the summer of 1990 when she saw them on TV. The interview took place in December 1990. I had given her the CCCS anthology (Noyes, Enigma) to look over.

- CS So these are the crop circles. Jeeze they're bizarre. ((shakes head several times whilst looking at pictures.)) And what is it that's supposed to make these things?
- BM Beats me. All kinds of things.
- CS I saw a programme once and they said something about whirlwinds but no way. That's just too bizarre. I think it's got to be UFOs.
- BM Quite a few people do think that.
- CS ((Looks at 'swastika')) There's no way any thing natural could make that. That has to a UFO landing.
- BM Yeah. But then again you do wonder why they land in cornfields.
- CS They're flat. I would have thought they would make excellent landing places. And they're not near roads and there is no one about so no one would see them.
- BM That makes sense. Then again you never see footprints around them anywhere.
- CS ((looks at me as though that were the most stupid comment in the world.)) They don't have to walk or go outside if they don't want to.
- BM Yeah. You do gets lots of different shapes though. Like that one ((showing the Alton Barnes formation on the back cover which she had not previously noticed.))

CS That hooks like a UFO to me. See you've got two different parts to it ((referring to the double dumb-bells)) and they could be the engines. And that's where it touched down. ((Unclear as to what she is referring to.))

BM Oh right.

3.2.5 Cereology and the ETH

The preceding information should have shown that the extra-terrestrial hypothesis is facing something of a challenge because of the crop circle phenomenon. Amongst those in the circle research community it has already
been extensively revised and this revision appears to be becoming increasingly common among the general populace. It is already being expressed in
cartoons and advertising wherein the cereological hypothesis that crop circles
represent communication provides a ready metaphor. The emergence of the
cereological hypothesis and the ensuing tension between it and the ETH has
been crucial to the impact of the phenomenon. The analysis of the attempt
at a radical reinterpretation of the ETH and the role that the crop circles
phenomenon has played in provoking that reaction is central to the final two
chapters of this thesis.

3.3 The Hoax Explanation

The basic premise of this school of thought is quite simple — all crop circles are made by people. The ceasons and motivations of the boaxers are a matter for debate, but the result is the crop circle phenomenon. It should be noted that very few people see the whole phenomenon as a hoax perpetrated by one group of individuals, although some incline to the view that a large number of circles may have been made by a certain group of people. For example Jenny Randles and Paul Fuller, who part company with Terence Meaden on the extent of boaxing that they believe to be taking place, seem at times to take the position that a majority of the modern, complex crop circles could be the result of a single body of people working deliberately to fool credulous individuals. 10

In this thesis I define "hoaxing" as the deliberate act of creating a crop circle. There is a, sometimes fine, distinction between that and circles created as a side-effect of some human activity. Belief in the latter often goes hand in hand with the belief in hoaxing. The main focus for this section is on the hoax theory which can be seen as the most similar explanation in type to

^{6&}quot;Fuller and Randles, "Crop Circles" 104.

⁶⁴Bandles and Puller, Mystery Solwed 72–75. It should be noted that Jenny Randles and Paul Fuller are not a single, homomorphic entity. Paul Fuller tends to lean towards viewing many of the pictograms as at least partial hoazes, ie. genuine circles that have had elements added by human hands (personal communication and answers to various questions at the BUFORA lecture in Spetember 1990) whereas Jenny Randles seems to have immense problems accepting any sort of meteorological input to the pictograms. See her comments in The Circular 4 (1991): 13–14.

Gillian Bennett's "rationalist tradition" (Traditions).

It should be noted at this point that hoaxed circles do exist and that all circles researchers agree that there is an element of hoaxing in the modern phenomenon. The disagreement is over the extent of the hoaxing and the ability of circles rescheres to differentiate between hoax and genuine circles. The issue is further muddied by the fact that there are many different types of hoaxing.

Self-Evident hoaxes. These are hoaxes that are constructed in such a way as to leave no doubt about their origin. Such circles may be formed for a variety of reasons: to embarrass circles researchers, apparently the main motive behind the Bratton Hoax; to publicize the hoaxers, as is the case when the Acid-House music group "KLF" pressed their logo into a field near Silbury Hill and then featured it in a promotion for a new music video, or to simply make a joke, which appears to be the motivation behind the "smiley face" circle that appeared near the Alton Barnes pictogram (see figure 3.3) and the appearance of the phrase "We are not alone" flattened into the field in the Punchbowl at Cheesefool Head in 1986 on Of these hoaxes there are two types:

Garage Wingfield, "A Carefully Planned Hoax". A picture of the formation appears in Williams, "Hoaxing and the Open Mind".

See Delgado and Andrews, Latest Evidence 46-48, for a discussion and photograph.

Note that although the authors appear to consider it a genuine formation, the consensus amongst other circles researchers is that it is a hoax, for example, Wingfield, "Ever Increasing Circless" Randles and Puller. Musters Nolsed 16.



Figure 3.3: "Smiley Face" circle near Alton Barnes
Photograph shows a "smiley face" hoax circle with two columns of unflattened corn for the eyes and a standing arc for the mouth. (Photograph
© G. T. Meaden.)

- Those in which the shape of the formation is self-evidently a hoax: the smiley face, KLF logo and "We are not alone";
- 2. Those which could be real formations but in which hoazers leave clues: this includes the Bratton hoaz in which fake ouija boards and crosses were left, and possibly the formation at Littley Green in Essex which may have been inspired by a pun the circle being made, perhaps, by Littley Green men.⁶⁴

Non-obvious hoaxes. In these cases the hoaxers do not intentionally leave clues. It is the criteria for differentiating non-obvious hoaxes from genuine circles that are a matter for debate amongst circles researchers. Known examples of this type are formations such as one hoaxed at the behest of a national daily newspaper in 1983 at farm near Westbury.⁶⁵
There have also been demonstrations of hoaxing undertaken in which a group of people try to recreate a circle under the eyes of outside observers.⁶⁶ These, however, are not usually promoted as genuine crop circles but as demonstrations of the feasibility, or otherwise, of hoaxing

Hoax hoaxes. A final category appears to be those circles which are claimed to be hoaxes but which may not be. For example, an individual by the name of Fred Day claims to have been making circles for over forty

⁶⁴ Randles and Fuller, A Mustery Solved 67-68.

⁶⁵ See, Randles and Fuller, Mystery Solved 28, 63-64.

⁶⁶ Randles and Fuller, Mystery Solved 68-70.

years and constructed a hoaxed circle in front of some reporters to prove his ability to do so. ⁶⁷ Although there is no reason to doubt that he did make the crop circle shown in the photographs, which appears to show some features normally claimed only to appear in genuine circles, there are good reasons to doubt the veracity of his claim to be the major producer of circle formations in the UK. Another example of this may be a formation discovered at Margate in Kent in 1989. In this case two young men claimed to have seen a glowing light descridinto a crop field and when they went to investigate they found a circle directly beneath some power lines, and this is a case that is often cited as strong evidence for the meteorological theory. Later, however, some individuals came forward and claimed to have hoaxed the formation and currently no one is too sure of the status of the formation.⁵⁸

Applying the above hoax categories to circle formations leaves a core
of formations that can be best termed "genuine". Although individual researchers vary over what is or is not included in that core, it is these circles
that they explain with their theories. The same is true of the hoax theory, which explains these core circles as the results of hoaxers. Unlike the
meteorological and cereological explanations, this theory has not inspired a

⁶⁷ See. "How To Make Those Corn Circles."

⁶⁸Personal communication from George Wingfield. The case is reported in Fortean Times 53 (1989): 37. Paul Harris the main investigator of the case emphatically believes that the percipients are giving a sincere account of what they saw (The Crop Watcher 4 (1991): 12-13).

great deal of research activity. Indeed, the leading detective of hoazed circles is probably Jenny Randles who mostly relays her findings through the "Informed Circles" column that she writes for The Crop Watcher. That said, there have been some published articles arguing for the hoax explanation, the most notable being David Pisher's article in The British & Irish Skeptic. For now, as in the preceding sections I will sketch the methods by which the hoax theory explains the various phenomena associated with crop circles before moving on to consider the extent to which this explanation is held among the more general public.

3.3.1 Explaining the hoax theory

Amongst circles researchers the hoax theory is generally held only by the
"skeptices". The term is an American one, used to denote a group of individunals who have made it their business to prove that fraud, generally, is at the
root of all supernatural phenomena. The skeptics form something of a contained community, disseminating their views through newsletters and their
respected journal, The Skeptical Inquirer. The 'k' in skepticism is important because it distinguishes it from the philosophical concept of 'scepticism'
which maintains that nothing can be truly known.

⁶⁹I draw extensively on Fisher's article in the explication of the hoax theory. Unfortunately my version of it is an unpaginated version sent to me via electronic mail, so precise page numbers are not available. My thanks to Toby Howard of The British & Brish Skeptic for sending me this copy.

Skeptics come in a continuum of "wet" to "dry". Dry skeptics, 'stars' such as James ("The Amazing") Randi and Phillip J. Klass are "hardcore debunkers" whose self-proclaimed goal is the elimination of superstitious belief from the gullible public. Wet skeptics like to put the 'c' back into scepticism and are often willing to grant the existence of supernatural phenomena as something that will become explicable by science. The rallying call for all skeptics is William Occam's principle of parsimony, usually known as "Occam's Razor", which states, briefly, that the simplest explanation for a phenomenon is usually the best one. Of these varieties, David Pisher can be thought of as being towards the dry end of the skeptical continuum. Although he had in the past publicly supported the meteorological theory, he found that the hoax explanation fit the evidence much better.

David Fisher succinctly states the skeptical position with respect to crop circles when he writes that:

...it is better to believe in human poculiarity (an established fact) than to upset part (Meaden, Randles and Fuller) or all (Delgado and Andrews) of current physics.

Consequently it is not necessarily a skeptic's task to put forward a working

⁷⁰See the interview in this thesis, starting page 143 in which the a book-store owner makes precisely this claim.

[&]quot;Lacey defines Occan's razor as follows: "entities are not to be multiplied beyond necessity.... More generally one should choose the simplest hypothesis that will fit the facts. A stronger form claims that only what can nobe dispensed with is real and that to postulate other things is not only arbitrary but mistaken." Dictionary of Philosophy 147. The stronger form provides the rationals for the act of debunking.

^{72&}quot;A Rare Circle for Skeptics." Weekend Guardian 18 Aug., 1990: 17.

explanation, but to eliminate other theories so that only the skeptical one is left. So, the major part of his article is devoted to casting doubt on the evidence for other theories. He does, however, put forward some tentative proposals for how hoaxers could go about making circles, albeit with the caveat that it "is just a silly ad hoc theory."

Fisher speculates that circles could be caused by a piece of farm machinery being driven along the tractor lines and then steadying the steering wheel to slightly off-centre. The non-circularity⁷³ of crop circles would occur due to the irregularity of the ground. The phenomenon of gap-seeking could be explained as the driver fumbling when trying to get the machine back onto the tractor lines. This would provide the circumference of a circle which could then be filled in at a later date. ⁷⁴

Various other circles phenomena could be achieved like this. Fisher notes that circles display banding, as if combed, and suggests that a large, comblike implement could be attached to the tractor. Furthermore, he posits that the central pyramids of untouched corn occasionally found in circles could be caused by the machinery being too cumbersome to complete the swirl. He notes that spray booms often drop lumps of persistent foam and speculates, correctly as it turns out, that the white, gelatinous substance found by Busty Taylor in 1985 could be so-explained. Finally he theorizes that the "extra

⁷³ See section 1.1 of this thesis, page 8

⁷⁴This theory, and indeed the whole article, generated a comprehensive rebuttal by Fuller and Randles. See their "Review of David Fisher", both parts.

⁷⁵ See discussion in chapter one. Fisher's explanation has now been widely accepted

touches" to formations could be achieved by people working on foot, using

Peter Williams, writing in The Cerealogust, takes this argument a few steps further in the light of the 1990 developments. His main thesis is that many of the crop circle features listed in Randles and Puller as inexplicable by the hoax theory have now been demonstrated possible. He presents the case of Fred Day, the self-confessed circle-maker of some forty years, who is able to travel through a crop without leaving marks by using stills and whose circle appeared to demonstrate a precise spiral lay and banding effects. He also proposes an analysis of the use of a rope attached to a central pole to guide a heavy roller of some sort that would account for the non-circularity of most crop circles.

Williams also notes that the Bratton hoax demonstrated that it was possible to hoax a full-scale pictogram in a short period of time, in total darkness, under the observation of several trained circles researchers, with elements that could not be reached by tractor-lines. This exercise largely accounts for many of the features that most circles researchers have long claimed that it was impossible to hoax.

It is also possible to account for facets, other than the internal complexity of crop circles, through the hoax method. Both Fisher and Williams note that the circles phenomenon appeared to start in an area that has a long

amongst circles researchers.

⁷⁶ Randles and Fuller, A Mystery Solved 137-140.

reputation for strange occurrences and is home to many occult groupings. Fisher describes the area as Britain's California — "a case of everything loose slipping to the bottom rather than sliding to the left, perhaps?" — and considers that these groups may have a vested interest in creating a mystery. Williams points out that during the UFO flap of the sixties many groups were known to head to the hills and flash lights at UFO spotters in the hope of fooling them and that one group also hoaxed a circular mark in grass that was claimed to be a UFO landing nest (11). Therefore it is argued that such hoaxers may be responsible for the apparently sudden appearance of the formations in the area in the middle-seventies.

This approach is also used to explain the evolution of the phenomenon. Both authors explicitly reject the notion that there may be a huge conspiracy at loose to create circles all over the country. Instead, they propose that the phenomenon is snowballing as more and more individuals take to the fields to make their own crop circles. Fisher says, "In recent years, all of the publicity may well have established a common focus and style for the jokers." However, Williams does consider that the locally based pictograms may all be the result of a single group gradually perfecting their technique. They start with single dumb-bells that are somewhat irregular and gradually add more shapes to their repertoire until they finally produce the "masterpices at Alton Barnes, Beckhampton and Allington Down" (11). He notes that a common motif in the patterns appears to be a representation of the "Starship Enterprise" —



Figure 3.4: A circle formation compared to the "Starship Enterprise". The figure on the left is a schematic of the circle formation found at Chilcomb Farm on May 23" 1990 — the first pictogram found. The proportions are based on a sketch by George Wingfield. The figure on the right is a top view of the "Starship Enterprise", as featured on the science-fiction TV show "Star Trek".

see figure 3.4.

The argument is that hoaxes have been proven to exist in other phenomena, that the circles phenomenon has had hoaxes that appear to match the features of genuine circles and that the area in which they are most prevalent contains a high-density of occult groups who have good reason for promoting a mystery. Furthermore the publicity gained by the phenomenon is thought to increase the interest in hoaxing. As Williams says:

These days the rewards are higher than ever before — there are 'scientists' to fool, and your work can appear on TV or in books. Even out of the way circles now get reported so hoaxers can not lose. (11)

3.3.2 Who believes in hoaxers?

The previous paragraphs have given an overview of how a hoax explanation can be applied to the circles phenomenon. There is no circles researcher with the avowed aim of proving this theory correct, but, as the following paragraphs should show, it is probably the most popular explanation amongst orthodox science, farmers and the general public.

The orthodox meteorologists

As I indicated in the section on the meteorological explanation, the orthodox meteorological community appears to favour the hoax explanation above all else. This may be changing, but the following quote from a Weather reporter in the United States appears to be twoical.

Saying that a weather event happens in only a few special place is perhaps less odd than saying that the special place is England. Cool oceon-influenced climates don't get much interesting weather other than the occansional monster winter storm. The USA pacific northwest is somewhat similar. In contrast, the USA as a whole is a world leader in interesting weather. Add in the fact that interesting weather to the than big storms and frontal passages usually occur in daylight (mid-alternoon to early evening) and the "midnight microburst's scenerio becomes about as likely as the scenerio of little green men using England as a giant etch-ackerth."

⁷⁷The quote is from a piece of electronic mail posted to the newsgroup "Sci.skeptic" a forum for skeptical discussion of anomalous happens. The original form and spelling has ben kept. Steve Olson, "Re: Crop Circles?" June 3, 1991: Message-ID, OLSON.91Jun31-107346goonerii.juliet.ll.mit.edu.

The meteorology office at Bracknell, in the UK, has been similarly dismissive of any kind of meteological or cereological explanation for the crop circles, preferring to ascribe the responsibility for their creation to drunken locals.⁷⁸

Farmers

Fuller's survey in 1987 appeared to show that although farmers were divided about the possible causes for crop circles the largest minority suspected hoaxing (Controversu 87-93). In my research this was still generally the case.

Telephone interview. Farmer (DB) had never had crop circles but a nearby farm did in 1990. 15 February 1991.

- BM I'm interested in knowing what you think about their origins.
- DB What do you mean?
- BM What do you reckon causes them, the crop circles?
- DB Can't rightly say as I know. I know some think its whirl-winds or little green men or summit. [something] I don't reckon so myself. They're really perfect and the crop's flattened, that's what I heard.
- BM Um, yeah. Some say that.
- DB I've seen crows eat patches but that's different. No, it's a bunch of young kids getting up to mischief. That's what I think.
- BM You think they're all hoaxes then.

⁷⁸ Their position has been widely quoted in various newspapers.

DB Well it certainly ain't space aliens I know that much, and there's no way any kind of whirlwind will make a perfect circle. Anyway, we're always getting kids larking around here and they better not go making circles on my land!

This feeling can be seen in the recounting of an encounter with an angry farmer in 1987 when Colin Andrews, Pat Delgado and Terence Meaden attempted to survey a strange formation in Whiteparish.

Some thirty minutes later he returned with a police officer and gradually it became clear why he had been so angry about circles and our presence in his field. He had farmed the land for 29 years and during that time he had found many similar circle marks. Ille was clearly convinced that they were formed by people and was desperate to catch those responsible. (Delgado and Andrews, Gricular Buildence 55)

The General public

The hoax explanation seems to be the most popular amongst those who are least impacted by the phenomenon. There are a variety of ways in which they justify their opinions.

Interview. Female medical trainee in London (EP). June 1990.

BM I'm actually interested in crop circles, the circular formations that you get in fields.

EP Those? People are still interested in those?

BM Uh, yeah. At least I am.

EP I thought they had been explained.

BM Um, I hadn't heard.

- EP I remember on the radio, last year I think it was when there where all those circles in Wales. They were all done by the farmer.
- BM Oh, those. Yes, they were circles cut into heather. I'm thinking more of the ones where the crop is flattened. Do you think they're all made by farmers as well?
- EP Not all of them. I've a friend who made a circle once.
- BM You have?
- EP Yes. He and a few friends went out into a field to see if they could make make one. He said it was quite simple really they just tied a rope to a post and poshed all the corn over.
- BM Oh right. Do you think that's true of all of them.
- EP Oh yes. It's just a lot of publicity. Gives the papers something to print in summer.

In this case it can be seen that she has several reasons for her opinion. Firstly there is the matter of the Webh circles from the summer of 1988 which were actually cut into heather by a farmer to allow grouse to settle. Be the actearly interpreted this as the explanation for the whole phenomenon. When I hint at this she reveals that a friend has made a crop circle and that his experience was that it was easy to do so. Finally she ascribes a motivation for the hoaven: publicity seeking.

This account was unusual in its detail. Perhaps more common are the two
examples below which were collected from young men in a pub in October
1000

⁷⁹ See section 1.2.3 for details.

Interview in pub. SE is a draughtsman at a local factory. He is the son of OE, interviewed above. (Page 175).

BM What do you reckon to the crop circles then?

SE Them? That's a load of shit.

BM Yeah?

SE Fuck yes. Get a bunch of the lads pissed up at the pub and they go out and make one in the nearest field.

BM Your old man doesn't think that.

SE Oh well. He's really into all that stuff.

BM Um?

no harm.

SE Science-fiction, flying saucers. He really believes in all that.

BM Not you then.

SE Fuck no. Still I guess, if you want to believe in it it don't do

In this first example SE gives the culprits, drunk locals, and leaves it at that. When pressed on his father's beliefs he ascribes them to a generic belief in "science-fiction, flying saucers" his tone making it clear that this did not form part of his world view. In the next case, PM, a clerk with the local council, who did not hear the conversation with SE, gives a similar opinion and hints that he believes that young farmers are the most probable culprits.

BM What do you know about crop circles?

PM "Crop Circles." ((Laughs.)) What the fuck do you want to know about them for?

BM I'm interested in finding out what people think about them.

PM Fucking hell you do some weird things!

BM Everyone's got to do something I suppose. What do you reckon to them anyway?

PM ((Dismissive gesture)) Bunch of young farmers out on the piss I reckon. Get's all the hippies excited! ((Laughing))

3.3.3 Who are the hoaxers?

It is useful to note at this point that there are various different groups of people suspected as being the culprits behind crop circle boaxes. In the examples above, young farmers and drunken locals were mentioned. This was a widespread belief amongst those I talked to as well as in reports in newspapers, TV and radio shows, and other media ostlets. David Fisher nominates a similar culprit:

Why is it done? Well, why are people drawn to make patterns in sand or snow? Could not an underpaid farm-worker do it out of boredom or resentment?

Different hoaxers were nominated in an unplanned conversation with an elderly man, out walking his dog, whilst I was trying to find a crop circle near Sheffield, August 3rd 1990.

BM Do you know where the crop circle is? I heard there was one around here somewhere.

OM Crop Circle? Oh that thing. ((Gives directions)) Don't know what you want to go and look at that for, it's all a load of old nonsense.

BM What do you mean?

OM Oh it's just some bunch of hippies or young punks with nothing better to do, go and mess around in some farmer's field

BM You mean this one is a hoaz?

OM They all are. It's just a bunch of nonsense.

Hippies, or occult groups in general, also tend to take much of the blame in known, or suspected hoaxes. For example, when the Chilcomb Farm pictogram was discovered in May 1990, Paul Fuller first suspected that the rectangular boxes had been added by some travelling folk seen nearby and only later changed his opinion.⁸⁰

The influence of alcohol also figures large in hoax beliefs. The two examples above collected from SE and PM mention the role of beer in influencing people to go out and make crop circles. Diane Goldstein has noted the frequency of this correlation in other traditions of disbelief⁴¹ and I return to this point in the next chapter. For now, the cartoon in figure 3.5 gives a humorous summary of the relationship between drunkenness and the activity of creating a crop circle.

Hoaxing as art

A less serious but still commonly mentioned theory treats the hoaxers as artists, or at least some form of agricultural graffiti artists. The KLF logo and smiley faces mentioned above could be seen as examples of this impulse. A similar case could be made for the suspected hoax at Sedgehill, Tyne

^{8&}quot;His views were reported by The Western Daily Press 12 Jun., 1990: 14-15.

⁸¹ Personal communication. Often sceptics explain the perceptions of someone who has an anomalous experience as being affected by alcohol or other drugs. See Hufford's Terror 12-46



Figure 3.5: Strip cartoon: "Megalomedia" A new idea for the identity of the hoaxers. Reporters for tabloid newspapers, such as *The Sun* have a bad reputation for drinking and inventing stories. (*The Guardian* 30 Jul. 1990)



Figure 3.6: Drawing of a formation at Sedgehill, Tyne and Wear The illustration is based on a plan by Paul Allison that appeared on the front cover of *The Crop Watcher 3*.

and Wear. In this case a key shape was found, similar enough in style to the triangle at Beckhampton to make it a non-self-evident hoax.*2 (See figure 3.6.)

A not uncommon reference has been to refer to "landscape artists" such as Andy Goldsworthy as the perpetrators of the circles. Andy Goldsworthy is noted for his constructions of circular objects in natural phenomena. Although Goldsworthy himself sees no connection between his work and crop circles it has not stopped others from trying (McEwen 9). For example, the following extract occurred during a radio show in which Melvyn Bragg interviewed George Wingfield about the crop circle phenomenon. 83

Melvyn Bragg Cynthia Rose, you want to come in.

Cynthia Rose Well I know a lot of people who are listening

⁸² Fuller, editorial, Crop Watcher 2: 3-4.

^{83 &}quot;Start The Week." BBC Radio 4. Monday June 25, 1990.



Figure 3.7: Cartoon: "Designer Field" Michael Heath, cartoon, Mail On Sunday 29 Jul., 1990.

who might not have seen the diagrams have seen this on the Vauxhall ad where the car drives past a corn circle...

George Wingfield Well yes, but that wasn't a genuine one that was just made for the ad...

Cynthia Rose Ah, well if it was made for the ad, then how can you be sure it isn't some, sculptor like Andy Goldsworthy out making them in the fields?

A possible response to the concept of crop circles as artistic hoaxes is to regard them as 'pretentious', and this view is illustrated in the cartoon in figure 3.7.

I did not collect any seriously held beliefs about the possibility of cropcircles being hoaxed for artistic purposes. It would seem to be more of a parody explanation, that is to say one that is used only in a humorous context. That such types of explanations exist is one of the reasons given earlier for considering them as a folklore genre.

The army

The most popular culprit in the folk explanations of crop circles, after drunks and hippies, was the army. The example below, collected from a bar-maid in January 1991 gives a clear statement of this.

Interview January 30th 1991.

- BM So what do you think causes crop circles?
- JO I don't know. I haven't really ever thought about them.
- BM So you've no idea. ((pause)) Some people think they're electronic whirlwinds, or UFOs.
- JO It's more likely to be six drunks after a night out The Plaza⁸⁴ going for a prank. Actually, I'll tell you what I do recken. A lot of circles are on Salisbury Plain, around Stonehen; e aren't they and that's where the army exercises. You could easily drop something from a helicopter and that wouldn't leave a mark. I have a couple of a friends in there [the army and navy] and they get up to all sorts of stuff. You wouldn't believe it. Not crop circles, but all sorts of other things and it wouldn't take much.

In this case JO initially blames local drunks but then discards that in favour of a more appealing theory. She bases her theory on the premises that the circles occur in places where the army exercises and her own observations

⁸⁴A local night-club. The name has been changed.

that its members are known to conduct various pranks. Although she has never heard of crop circles being created in this way she infers that it could, nevertheless, be the case.

The army are also considered the originators of various hoaxes by those who do not consider hoaxes to be a general explanation. The clearest example of this is the widespread opinion amongst circles researchers that the military may have been responsible for the hoaxed formation at Bratton during Operation Blackbird.⁸⁵

The Bratton Hoax

During the last week of July in 1990, Colin Andrews and Pat Delgado organised a crop watch by the name of Operation Blackbird. The aim of the operation was to capture the formation of a crop circle on film. The project was the most expensive undertaken with equipment valued at over £1 million, but the quality of the equipment is criticised by both Meaden ("When") and Wingfield as being inadequate for its purposes ("Carefully").

The central events occurred in the early morning of July 25th when the organizers announced to BBC TV that they had captured the genesis of a formation on film and were about to visit it with a camera team. It was

^{**}The most extensive accounts of the hoax are given in Meeden, "When is a Crop Gircle Not a Crop Gircle?" and Wingfeld, "A Carefully Planned Hoax." Of the hoax, Meeden states, "It actually has the look of a military operation." (188) Wingfield is more direct and bases his article on the thesis that the formation was the wrk of the army. A curious article by Clive Potter recounts the discovery of a mutilated horse found at Bratton Castle, and from Age hillingth, during Operation Blackbird.

not until Andrews and Delgado actually entered the circles that their true nature was revealed, for in their centres were imitation ouija boards, wooden crosses, and, in one, a piece of red wire the same length as the diameters of some of the circles.

There are two main reasons given for believing that the army was responsible for the formation. The first is that to successfully complete such a complex formation in the full glare of the surveillance project required a great degree of expertise. Terence Meaden states:

...one must admit that to achieve such an exacting effect during a night-time operation speaks volumes for an exceptional degree of design planning and organizational skill. (386)

Although Meaden stops short of actually blaming the army, Wingfield has no such inhibitions. He notes that the army were deeply involved with Operation Blackbird and that the hoax had the look of an "inside job". For a start, the two army corporals normally on duty went missing that night; secondly, the formation was placed only just out of reach of the range of the monitoring equipment; and finally, the hoaxers seemed to be aware of the procedure to be followed should some crop circles be discovered.

The second reason that Wingfield gives for suspecting the military was the presence of the various artifacts in the circles. He proposes that they were placed there to lay the blame on occult groups and to insinuate that the whole circles phenomenon was nothing but a hoax. As Wingfield himself savs: GW Well um, it's a sad thing but uh, I think that the, army and the government and the, security services and all of those people were really rather alarmed by what was happening at the end of July and, a lot of the circles, and the vast numbers of people who were going to see them, queues of cars all over the place and, um, they were really getting quite alarmed and they thought the only way of defusing the situation was to, try and make it look as if they were all hoaves.

and think that to some extent they succeeded.

And, if you remember with the Bratton circles, um, they left in the circles, the hoaxers, left uh ouija boards and wooden crosses.

BM Yeah, I heard

GW Now why would anyone do that?

I'll tell you exactly why

uh, the reason that was done was because there was a, a, there was always the possibility that Andrews and Delgado, having examined these, circles, might say "Oh yes they're genuine they're they're, the real thing" and this would merely have, doubled public hysteria about the circles if this had happened. So they had to, indicate that they were a hoax in some way and yet, being the army, and, not wishing to be seen to, engage in any kind of skullduggery, uh, the army couldn't get up and say "we did it, we hoaxed them" they had to leave behind some evidence that, they were hoaxes, that would be found

and they also knew, because the army were, closely involved in the Blackbird project, there were army people there every day. They knew exactly what the form was and they knew that, um, Andrews and Delgado had laid down no one would go into any of the circles, if circles appeared uh until they had been photographed from above, and that Colin Andrews and Pat Delgado, would would be the ones that went in first. So they knew that um

they could set. Andrews and Delgado up in a big way and

then uh, cause of course total havoc and um discredit to them.

Which is what they did. Therefore they left these things in the circles and they must have, um, they must have thought for a time "what are we going to leave behind in the circles to show they're hoaxes?" And they probably settled for, something which would point to, New Age people and occult groups as being the, authors of these circles. More appropriate I I uh would say would be a pair of army boots and uh, um, a field marshall's, baton. Something of

this kind. (Tape-recorded interview, Rev. 460-508, side 1)

Aftermath of the Bratton hoax.

The hoax did seem to inspire an upsurge in popularity for the hoax explanation. Several newspapers ran articles on how to hoax your own circles⁸⁶ and the excerpt from the *Daily Express*, below, is typical of the immediate reaction.

*It's the Young Farmers they'll do anything for a laugh" said locals down at the Duke of Bratton pub as the scientists said locals down at the Duke of Bratton pub as the scientists riside to explain away their enthusiasm. So ended the riddle of the Corn Circles, that has had the nation agog. Some said they were created by demented hedgehogs, running in ever-decreasing circles. Prehistoric civilisations were said to be coming to the surface. Helicopters were blaned until somebody pointed out it was impossible for choppers to weave such patterns unless they were flying uspide down. (26 Jul., 1990: 3).

Instead. The Sunday People advised its readers to:

Forget about flying saucers, whirlwinds and earth vibrations the mystical rings are made with a ball of string, a thin steel

AG For example, "How To Make Those Corn Circles"; Mail on Sunday 29 Jul., 1990: 22.

rod, a small hammer, a papier mache tube and an aluminium hand-roller, four feet wide. ("How to make those corn circles" 12)

Whether this upsurge in belief of the hoax explanation occurred throughout the general populace is more difficult to say. It may have acted to counteract the dramatic effect of the pictograms but no suitable quantitative data exists. Certainly I did not find a noticeable change in the number espousing particular theories nor did anyone use the Bratton case as proof that all crop circles were hoaxes. One person did mention the newspaper articles on how to create crop circles.

Interview. TP is an insurance salesman who almost attended the BU-FORA lecture given by Jenny Randles and Paul Fuller by mistake.

BM This is a lecture about crop circles.

TP Crop circles? The things from the summer?

BM Yeah. I was wondering in fact what you thought caused them.

TP You mean people are still interested in them? I thought they were all discovered to be hoaxes.

BM Not every one thinks so.

TP No way! I saw them, no that's right I read about how they were made in a paper.

BM Which one?

TP I can't remember now, I read two or three. I remember the story, apparently it only took a few minutes to make them and that was it. You had to tie a rope to post in the ground and walk around in circles for a while. That was all there was to it. Wouldn't surprise me if they did them on the Generation Show.[A popular quiz show] ((laughs))

In the case above the man clearly uses the newspaper articles inspired by the Bratton hoax as proof and places great emphasis on how easy it would be to make one. He refers to "The Generation Show" in which contestants, without any training, have to try to copy jobs, such as making Havana cigars or clay pots, normally done by professionals. The influence of the pictograms has lead some to question hoaxes as an overall explanation. For example, in an earlier interview I asked a woman, EP, about her opinion for the cause of crop circles, (See page 195) after trying to get in contact with the individual who had told her that he had made a crop circle, I eventually collected the following conversation. (January 23rd 1991, telephone interview)

BM Did you manage to get hold of the person who said he had made a crop circle?

EP Crop circle?

BM You know. The crop circle formations in corn fields.

EP BD, you mean BD.

BM The guy who made the crop circles.

EP He didn't actually make one he said he had seen it on TV.

BM Oh right.

EP Yeah.

BM Did he see the one with all the marines doing it?

EP No. No. He said a lot of local farmers did it. They'd decided to do it for a bit of fun to show how easy it was. He said it only took two minutes and it looked like real.

BM Oh. So you still think that crop circles are hoaxes then?

EP What? Do you want my opinion?

BM Yeah. Last time we spoke you said you thought crop circles were all hoaxes.

EP With simple ones it's very easy. They're all symmetrical, but the more complex ones they would be very difficult and I don't know about those.

BM You think they might not be hoaxes?

EP I can't say. I haven't studied them so I don't really have an opinion.

BM Everyone's allowed to have an opinion.

EP ((laughs))

In this case it can be seen that EP is much less convinced and less willing to offer an explanation for the phenomenon than she was at the start of the summer. Part of this may be due to her discovery that her friend had only seen others create a crop circle on TV but part is definitely due to the advent of the "more complex" pictograms.

3.3.4 Hoaxing and occult rituals

To close this section it is necessary to look at an alternative explanation that also views the crop circle phenomenon as the result of human handiwork. In this case, the belief is that the circles may be the hyproduct of occult rituals carried out in crop fields. George Wingfield asserts that this is the explanation that the army tried to propose for the phenomenon. It is also put forward by David Fisher in his skeptical analysis. The reviewer is willing to accept a paranormal explanation (of sorts). It is that circle-making might be a superstitious activity.⁸⁷

According to this explanation the circles are the result of purposeful human activity, but the rationale for their creation is quite different. This does not seem to be a widespread belief, Fuller's survey of 1987 found only one farmer who proposed it. ** During my fieldwork in 1990, I did not encounter anyone who held this belief, but in the previous year, I do recall twice talking with individuals who believed that crop circles were the results of the activities of Satanic covens. Similarly, Chris Woods, a photographer with The Daily Express and keen circles researcher, put forward Druidic ceremonies as one his favoured explanations at a BUFORA conference in July 1986. ** As a general explanation for the crop circle phenomenon magical rituals appear to have died out.

There are, however, some who believe that occult rituals have a large influence on the events. For example, occult groups figure prominently in Clive Potter's account of a horse mutilation that may have occurred during Operation Blackbird.

Increasingly there has been a lurid movement of occult-inspired ideas surrounding the crop circles. These range from the beliefs of

⁸⁷During redaction of this thesis, Diane Goldstein noted the way in which, amongst disbelievers, the supernatural is most often associated with popular occultism and Satanic rituals: a form of invalidation of the whole through a part. This appears to be germane

⁸⁸ Fuller and Randles, Controversy 91.

⁸⁰ Reported in Fuller and Randles, Controversy 95.

the Fountain group, who believe that the crop circles are formed by intelligent energies and are connected to the Earth, to more sinister outfits who are using this phenomenon to infiltrate and influence the research groups involved. This has become increasingly apparafis[cc] in recent months with the need for certain mystical groups to obtain the centre of any freshly-made crop circle for the purposes of some unknown magical ritual. [44]

Potter clearly sees that the cereology and occultism are both passengers on the same "ship of fools" that leads to irrational, anti-scientific "ranting" (15). He appears to be deliberately ambiguous about whether the occult groups create circles or make use of pre-existing formations. This more sinister possibility is not a generally accepted belief. Although hoaxers may be regarded as weird hippies, drunken fools, or a real "pain in the neck", "of few people regard them as a force for evil.

⁹⁰ Richard Andrews, at The BSD lecture, September 1990.

3.4 Other Explanations

The previous sections of this chapter have dealt with the three major explanations for the crop circle phenomenon. There are, however, several other theories that have been offered which do not properly fall into any of these explanations. With one exception, that of the helicopters, these theories have had no great success in terms of the number of people holding them. Most of these explanations are dismissed by circles researchers as either jokes, or as the meaningless speculation of "arm-chair theorists".

First we should rule out the absurd explanations trotted out by some sections of the media: hedgehogs, lovesick badgers, helicopters, fungi, subterranean archaeological features and so on.⁹¹

They do, however, have a life of their own, being disseminated by individuals, within lists in newspaper articles, or as jokes, and they contribute, often very colourfully, to the folklore that impermeates the crop circle phenomenon.

This section is comprised of three parts. The first part deals with explanations that assume a technological origin for the circles effect. The next looks at explanations which assume that the circles have a natural origin, which appears to be a belief held by many farmers. The final part examines a parody, or anti-, explanation that has emerged — the manic hedgehog theory.

[&]quot;Wingfield, "Ever Increasing Circles of Bewilderment", The Independent 4 Aug. 1990: n.pg.

3.4.1 The technological world

Unlike the hoax explanation, the items that can be grouped in this category can be seen as the accidental byproducts of human activity. Most of these have, to my knowledge, only been suggested by one individual or a small group and have not been generally accepted. That said, it should become obvious that there are several common themes running throughout these explanations

Satellites

One of the more popular origins postulated for the circles effect are satellites of various sorts. For example, one man wrote into the *Today* newspaper with the following suggestion:

I believe the Americans have a weather satellite that causes patterns similar to those that appeared in Wiltshire, on the American prairies. Could these patterns have been reflected and landed on our own fields instead of theirs?⁹²

The correlation of crop circles with satellites turned up again in an electronic-mail message sent to a bulletin board on June 5th 1991. In this case the author, from Galifornia, wonders if crop circles could be the result of pulsed microwaves.

The pulsed microwave theory seems plausible to me, or at least some kind of electronic signal from some highly technical facility on earth or perhaps in orbit that is causing the Circles....

⁹²L. Willis, letter, Today 20 Jul., 1990: 32.

It may be a combination of some hoax and some actual phenomenon occurring. I do not lean toward any naturalistic explanation of the Circles, I think they are the result of some kind of intelligent life, most likely Man, and the idea of microwave type signals causing them seems like a very possible answer (perhaps it is being done accidentally by some circling satellite??)³⁵

Other than these two examples I collected nothing else pertaining to this possibility, although there appears to have been an experiment performed in America in which a researcher placed a lump of turf in a microwave oven and cooked it. This resulted in the grass falling over and was used as evidence for the possibility of a microwave origin for, or component of, the circles effect. ⁹⁴ Certainly the research has sparked off some debate via electronic bulletin boards and may be gaining popularity as an explanation. ⁹⁵

The military

As noted in the previous section, members of the military are suspected by many of being involved in hoaxing circles. However, there are other explanations that see the circles as the results of military activity. Ralph Noyes notes this when commenting on the possibility of a government coverup operation being mounted over the crop circles phenomenon.

⁹³ whiz005@ucscl, June 5, 1991: Message-ID: 16636@darkstar.ucsc.edu

⁹⁴ According to Michael Choron's bibliography this research was presented in John Brandenburg's article in Mujon UFO Journal 276. I have not seen the article and can not comment on it.

⁹⁵A microwave component is postulated for Meaden's plasma vortex and its possible effects are noted in Randles and Fuller, Mystery Solved 158, 163.

- The Ministry of Defence (MOD) is conducting secret experiments with a new kind of "energy beam", mainly in the area of Salisbury Plain.
- The MOD, with the advice of Agriculture & Fisheries is testing a form of agricultural warfare (chemically or biologically based) which, when applied in due course to the grain-fields of the Ukraine, will bring the Russians to their knees. ("Whitehall" 49)

A variant of the first point was told to me on a bus travelling to Edinburgh at the end of December, 1990. In the midst of a long and rambling exposition, which I had no means to record at the time, the young man postulated that crop circles were the results of "super gun" experiments in which a revolutionary type of chemical warhead is fired over 100 miles. According to this man, the army had been experimenting with dummy warheads that caused crop circles when they landed and this was the explanation for the "radioactive jelly" left in the middle of the circles. **

It should be noted that the concept of a government cover-up of UFO phenomena, particularly in the area of crashed flying saucers and the storage of alien corpses, plays a huge part in the UFO phenomenon. Given the links between crop circles and UFOs it is hardly surprising that it should turn up in this context. I did not collect any such material, except in terms of the belief amongst some circles researchers that the government is interested in

⁹⁶The reference to the "radioactive jelly" appears to be based on the substance found by Busty Taylor. The "super gun" is a popular term for a weapon that was supposedly being designed by Iraq, using British technology, that would be capable of firing warheads a long distance.

defusing interest in the phenomenon. George Wingfield's narrative above, dealing with why he thinks the army conducted a hoax operation, is the clearest statement of the position. A more fragmentary account comes from a conversation overheard after the BUFORA crop circles lecture.

Man1 It wouldn't surprise me if those two [Randles and Fuller] were being paid by the government!

Man2 Don't joke. I heard of one person who thinks he's having his phone tapped.

Woman No!

Man2 Uh huh. ((...)) They're worried that's what it is.

Man1 Yeah. This isn't like MJ-12,97 you can't deny this. That must really worry them.

This fragment appears to show a sincerely held belief that the physical undeniability of the crop circle phenomenon is threatening to those in power.

All three tended towards some type of cereological explanation when asked,
but were unwilling to voice their opinions to a stranger with a note book and
tape recorder. It sometimes seems almost as if the military haunt the circles
phenomenon, forever lurking in the background, occasionally engaging in obscure behaviour. Throughout Gircular Evidence a phantasmagoria of MOD
officials, majors and colonels and army helicopters pass by. For example
Colin Andrews recounts a conversation with an army major who promised

⁹⁷The speakers are refering to a seemingly leaked document, labelled MJ-12, that reputedly details high-level contacts between the U.S. government and visiting aliens that is signed by President Truman.

to take some photographs for him. Afterwards he seemed to disappear: no one had ever heard of him and no one had seen the photographs (113). ⁹⁸

Helicopter circles

Probably the most popular of the human-technological explanations for the crop circles is the helicopter. Fuller's survey showed that helicopters were thought to be the cause of the circles by seven farmers, more than twice as many as those who blamed them on UFOs (Controversy 90-91). The basic premise is that the downdraught of a hovering helicopter, possibly in the process of landing, above a crop field could lead to a circle being formed. Army spokesmen have repeatedly denied this possibility.

Some believe they are caused by choppers. But an army spokesman says: "A helicopter could only make that shape if it was flying upside down over the same spot — then it would crash!" "90"

The West Country is the centre of helicopter production in Britain, with a Somerset town, Yeovil, being the home of "Westlands", one of the leading manufacturers of military helicopters in the world. Perhaps it is unsurprising then that the following letter should appear in The Independent on Sunday:

I feel sure that the answer may be fairly mundane in that circles may very well be caused by British remote-controlled helicopters.

⁹⁸In their analysis of UFO folk beliefs Clarke and Roberts frequently refer to the existence of 'folk devils' and name the army as one of them. The authors appear to hold the view that whereas once unusual events were blamed on the Devil, nowadays new devils, such as the army or the hole in the ozone layer, have emerged.

^{99 &}quot;10 clues to help crack secret of the corn circles." The Sun Jun., 1990: 7.

They are certainly near the helicopter factories and the corn fields would be good flat areas for night landings. (Peter Burden, 29 Jul., 1990; 18.)

I did not meet anyone who held the view that crop circles were caused by helicopters, though I did collect examples in which hoaxers were thought to use helicopters, as seen in the text from JO, above. (Page 203.)¹⁰⁰

Farm machinery

A final possibility is based around the effects of farm machinery. One person in particular, Robert Cory, has privately circulated a research paper that explains the circles as the result of long-term soil damage caused by a type of rotary farm machinery. He supposes that the Wiltshire area has special irrigation needs that are supplied through the use of rotating crop sprinklers. These machines spread the solution, a mixture of water and fertiliser, with circular symmetry. The solution is thought to contain trace amounts of toxins that affect the crop, causing it to weaken and become prone to falling over when hit by a gyrating wind.

Cory's theory is somewhat brutally dismissed by Terence Meaden. He undertook the simple task of carrying out a census of farmers who had discovered crop circles on their land and found that none of them had used any sort of rotational sprinkler ("Remarks" 19). Instead, Meaden surmises that

Its The relationship between helicopters and a wide range of folk belief is an interesting topic. Two good starting points are Dennis Stilling's "Helicopters, UFOs, and the Psyche" and Phantoms of the 5th by Clarke and Roberts.

all that is left of Cory's theory are the gyrating winds which cause the crop circles.

The rotational sprinkler theory is noteworthy in that it indicates the interest in trying to solve the crop circles mystery. Cory went to considerable personal expense and trouble to publish his theory only to risk being savaged by other circles researchers, as he was. Although it is not a theory I collected during my fieldwork, I did twice hear that the circles were the results of tractors turning in fields. For example, I overheard the following snippet of a conversation between a mother and child whilst travelling on a train to Bristol.

Mother ((Pointing out of window.)) See those lines there that's a crop circle.

Child ((Excitedly)) Where?

Mother There in the field by the tree. That's where the tractor turns around and goes up and down the field. See where the circle is, that's what a crop circle is. It's made by a man driving a tractor.

The woman was referring to a place in which a tractor had made a complete circle when turning around in a difficult part of the field, leaving what appeared to be two flattened rings. Although the child seemed reluctant to accept this explanation the mother was adamant.

Archaeological crop marks

At this point it is useful to note that approximately circular marks are left in fields due to the remnants of prehistoric settlements. Individual houses were often built in circles and protective ditches were often built around entire settlements. With time these ditches have filled with soil, providing a richer than normal growing environment in a circular ring leading to a lusher growth. In other cases the foundations of archaeological sites are relatively free of topsoil leading to circular areas of restricted growth. These archaeological crop marks are a known fact and have been used ever since the advent of aerial photography to guide archaeologists to new sites. 101

The similarity in form between these two phenomena has lead to some confusion, newspaper articles often refer vaguely to crop circles being caused by ancient civilisations and I suspect that this is to what they are referring. I certainly never collected any beliefs in this line although Fuller's survey found two farmers who expressed the view that the circles were caused by archaeological sites (Controversy 91).

³⁰⁴Indeed archaeological air survey archives have a huge quantity of material for circle-haunted Wessex and many circle researchers point to the lack of obvious crop circles in these photographs as showing the novelty of the phonemeon. For now it's probably fairest to say that I know of no intensive search that has been undertaken in this material to either prove or disprove the assertion.

3.4.2 The natural world

The previous part looked at a variety of explanations for crop circles that rely crucially on human culpability. A second set of explanations cluster around natural-world explanations: explaining the circles as the result of known, natural processes.

Animal effects

Animals can create circular damage in crops. In Circular Evidence, Delgado and Andrews display photographs of circles that had been damaged by crows (142–143) and discuss the means by which crows can create marks in crops that may approximate a circular formation (165). The authors rule out this possibility as well as others, such as rutting deer chasing each other in circles. They note, however, that some folk appear to accept animals as the cause of all circles, and quote a county council byways maintenance man.

'It must be fourteen or fifteen years since I first noticed them. They are made by rutting deer, because I have seen deer in the same field as the circle. I think the deer run around and flatten the wheat.' Although I suggested that this would damage the crop, he was unshakeable that anything else could cause them. (165)

Fungus effects

Another theory that has been strongly proposed for the origin of crop circles was first revealed by two botanists, Andrew Macara and Michael Hall, who wrote a letter to Country Life claiming that they had solved the mystery.

Grop circles, they said, are the results of a fungal infestation of the crop
which spreads out in a circular pattern. This weakens the crop, leading it
to fall over in a slight breeze. They also explain luminosity at circles sites
as the result of fungal phosphoresence. Unfortunately, as with Cory's, their
theory was demolished by a circles researcher, George Wingfield this time,
who discovered that neither had ever actually seen a crop circle. 102

Savaged though their explanation may have been, it has maintained an existence in the lists of crop circle explanations frequently printed in newspapers. For example, The Sun in publishing a list of "10 clues" included:

Fungus: some experts claim a fungus could cause the pattern. But plant pathologist David Lockley says: "The circles look too regular to have been formed by fungus." (Jun., 1990: 7)

I collected a variant of this explanation from a PhD botanist, (FW), on November 12th 1990.

BM I'm interested in crop circles. What do you know about them?

FW Oh I heard about them. They're caused by a fungus aren't they?

BM Fungus? What do you mean?

FW A fungus in the soil. It spreads out in a circle and weakens the roots, so when it gets windy the plants fall over.

¹⁰²Michell, "Down Among the Explainers". It should be noted that 'fairy rings' are actually caused by a fungus, and most circles researchers see them as totally distinct from the crop circle phenomenon. The occasional confusion between these two phenomena does have implications for those who are investigating the prehistory of the crop circles.

BM Oh. So that's what you think causes them?

FW Yes. In fact I remember we were talking about them in the coffee room not that long ago. That must be why it's in my mind. I don't go in for all this stuff about flying saucers and so on.

BM Why not?

FW Well, it seems silly. Why should something come from another galaxy just to make circles?

In this case FW clearly gives an explanation for the cause of the crop circles and opposes it to "flying saucers". It is also notable that she remembers a discussion in the "coffee room" which would presumably have involved other botanists. She said later that there was one lab assistant who thought that crop circles were made by "flying saucers landing" but that the majority backed the fungus as the origin of the circles effect. For herself she hadn't "thought very much about it to tell you the truth" but she was adamant, nonetheless, about dismissing any kind of cereological explanation.

Lightning

Another idiosyncratic explanation I came across was based around the effects of lightning. I only found this one example and have seen no other references to it, nor did I manage to get in contact with the informant's friend. It is interesting, however, for the parallels it shows to Robert Plot's analysis (to be discussed later) of the origin of fairy rings.

I talked with the informant (RC), a recent graduate in history and now

an accountant, in May 1990, before any of the pictograms had emerged and before I had discovered Plot's analysis.

BM What do you think causes them?

RC I don't think, I know.

BM Oh.

RC Yup. It's lightning.

BM Lightning?

RC Uh huh. I have a friend who is doing a PhD in the effects of lightning strikes and he says it's all pretty straightforward. You see, when lightning strikes it compresses the air in a column around where it earthed and that's what flattens the crops. That's how you get the little satellite circles as well.

The ozone layer

Possibly the most puzzling natural explanation is based on the perceived effects of the depletion of the ozone layer. The most complete example of how this explanation is constructed is given in the following summary:

Holes in the ozone layer could allow ultra-violet rays which could cause crops to collapse. But an environmentalist says: "This doesn't explain the perfect symmetry." 103

Given the exceptionally warm and dry summers of 1989 and 1990, along with the growing public perception of a "greenhouse effect" it is perhaps unsurprising that climactic changes should be connected to the circles phe-

¹⁰³a10 Clues" The Sun 20 Jun., 1990: 7.

nomenon. Writing in one daily newspaper Richard Andrews was quoted as saying:

Perhaps these circles are trying to tell us something. Perhaps an ecological secret. Perhaps they are harbingers of some awful doom. I know it can all sound such a load of hocus pocus but I believe we will be proved right. 194

This line of thought can be seen reflected in the following excerpt from a local news programme in the West Country. After a short piece on the new circles of 1990 the presenters were faced with making an ad-lib link to the weather forecaster. 195

Anchor I wonder, it's amazing ian't it. Well Tony Target's here from the weather centre. Tony what, the thing that baffles me about this is, if it was some natural phenomenon, how come it's got these prefect edges and no one's ever seen them happening either.

TT No. It's absolutely fascinating really, I would like to see more pictures of them but. One thing does occur to me, if it is a weather phenomena you would've thought it would've occurred more frequently in historical record. I don't know whether it is or not, but it's certainly very fascinating and quite mysterious too.

Anchor Perhaps it's the global warming that's changing everything now.

TT A global warning or global warming? ((laughs))

I did encounter one person who thought it "must be because of the holes in the ozone layer" but he was not able to elaborate on this. It seems that this

¹⁷⁴ Richard Andrews, Today 19 Jul., 1990: 3.

^{105 &}quot;Points West" May 1990, exact date unknown.

theory has not gained the status of a full explanation, instead it is thought to be somehow part of the problem.

3.4.3 Anti-explanations

In as much as there are various explanations for the origin of the circles effect there are also some that can be seen as anti-explanations. These are not meant to explain but to parody. There is a difference between this and between parodies of explanations. The latter takes an explanation and pokes fun at it. These parodies have most often been seen in cartoons, such as the one in figure 3.8 in which the belief that the crop circles are the result of flying saucers landing in crop fields is humorously extrapolated by the cartoonist. The former is a nonsensical explanation that is sufficient unto itself and the most dramatic example of this is the "hedgehogs" theory.

Hedgehogs

This anti-explanation seems to be traceable to a flippant comment made by a circles researcher, Martin Payne, who mentioned that he thought maybe manic hedgehogs were responsible. 108 The intent was to demonstrate that he did not think that any sensible explanation yet existed. However the manic hedgehogs explanation has acquired a life of its own. Time after time newspapers print lists of explanations as part of their reporting of the

¹⁰⁶ This according to Richard Andrews.

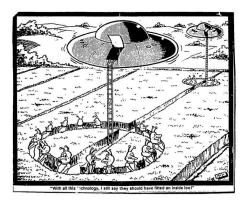


Figure 3.8: Cartoon: aliens use corn fields as a rest stop. I was unable to trace the origin of this cartoon which was forwarded to me by Paul Fuller from a clipping service.

phenomenon and time after time the hedgehogs, or their close companions, the lovesick badgers, turn up along with plasma vortices, space aliens and young farmers.

Some believe that the phenomenon is caused by a rare fungus or soil disorders causing the crops to collapse in bizarre patterns. Others insist that animals such as hedgehogs or badgers many(sic) have run wild in the summer heat, causing havor in fields. Some say that freak wind conditions could be the cause of the damage. Still more argue the circles are caused by aliens, landing their spacecraft or desperate to communicate with humans. But cynics dismiss the patterns as the work of practical jokers, using bricks on lendths of grote to falten cross. 107

Some say the circles are messages from aliens. Others put them down to mini whirlwinds, electro-magnetic fields, helicopters, hedgehogs, rutting deer or jet aircraft. (*The Daily Star* 20 Jul., 1990: 20-21)

Even Canadian newspapers mention them.

Other theories about the cause of the rings range from spaceships to the activities of earthworms to the mating practices of hedgehogs. (The Globe and Mail 4 May, 1991: d3)

It can be seen that in these extracts the anti-explanation is treated no less humorously than any of the others. One newspaper even set about trying to decide just how possible it was for hedgehogs to make a circle:

Theories include demented hedgehogs running in circles. But experts say it would take 40,000 hedgehogs to make one small circle. ("10 Clues" The Sun 20 Jun., 1990; 7)

¹⁰⁷ Today 20 Jul., 1990: 6. Italics in original.

Generally though the explanation is treated as a joke as the next example shows. BR is an old college friend who I had not seen for a few years. On meeting up with him and telling him my current activities he came out with the following. (February 3rd 1991.)

- BR I go for the hedgehogs myself.
- BM Oh ves?
- BR It's their revenge. After years of being squashed by trucks, drowning in fish ponds and being baked by gypsies they've had enough! ((laughs))
- BM ((laughing)) I see.
 - BR This is it. The revenge of the hedgehogs! The hedgehogs strike back! Hedgehog cornfield massacre! ((laughs))
 - BM You're the first person I've met to come out for the hedge-hogs.
- BR Well, there should be more of us. Makes more sense than anything else I've heard.

Amongst circles researchers the manic hedgehogs have become something of an esoteric joke. In every lecture I have been to the manic hedgehogs have been humorously mentioned at some point. Christine Rhone's series of cartoons for *The Cerealogist* have made the same point. (See figure 3.9.)

Finally, at this point is should be noted that crop circle explanations can be used to characterize the individual who holds them. For example, the following text appeared on a box cover to a computer game. In it the designers of the game were introduced and their characters summarized by reference to what they thought might be the explanation for the crop circles phenomenon.



Figure 3.9: Cartoon: Cornelia juggles the hedgehogs The figure of Cornelia has been systematically used as a symbol of a cereological circle maker by the cartoonist. In this case, the cartoon expresses the ridiculousness of the hedgehog anti-explanation. (Christine Rhone, "Cornelia", cartoon. The Cerealogist 3 [1990]: 6)

Greg Johnson prefers the deranged hedgehog theory concerning the unusual Angelic Wheat Circle Phenomenon, while Bob Gonzales suspects that perhaps, it is just an alien intelligence, possibly of terrestrial origin. ¹⁰⁰

¹⁰⁸Text appeared on the box cover of: "Starflight 2: Trade Routes of The Cloud Nebula", Electronic Arts, 1989. My thanks to Jamie Moreira for pointing this out to me.

3.5 Synthesis

The above is something of a sampling of the various explanations, and types of explanations that have been offered for the crop circle phenomenon. There are many, many more, but a comprehensive listing is beyond the scope of this thesis. Following chapters will build on the mass of data above. For now it is appropriate to note that although I have presented the various explanations in contrast to each other there are often surprising similarities between them.

For instance, Meaden's current version of his theory has been revised to allow for the possibility of electrical grids in corn fields that can act as "strange attractors" for plasma vortices, and he notes that the current solar output is at a 300-year high which may account for the sudden appearance of the pictograms. 100 Similarly Richard Andrews postulates a grid-like system of ley energy that can form vortices at certain points and which is currently being almost supercharged by the extreme amount of solar energy entering into the biosphere. The two theories, whilst sitting on opposite sides of what Paul Fuller terms a "chasm the size of the Atlantic Ocean", 110 appear to be almost functionally equivalent.

Similarly both cereologists and meteorologists are united in denouncing the hoax theory. For example, Noyes says: "If patriotism is the last refuge

110 Paul Fuller, "Review of David Fisher's Review." 23.

¹¹⁹His current analysis is presented in Journal of Meteorology 152 (1990), 156 (1991), 158 (1991), and 159 (1991).

of the scoundrel, hoax is the last refuge of those who can not bear to face uncomfortable facts," (Introduction 29). Yet many amongst the cereologists see the circle makers as hoaxers of a different kind, as a Robin Goodfellow, or a Puck, leading them in circles for reasons perhaps impenetrable to the researchers:

But what of the joker who does not unmask, like the perpetrator of crop circles? He forces us to unmask ourselves. He needs no satisfaction on the look on our faces [sie] He manipulates us for its own sake... Let us pray that his tricks stop at crop circles. (Happer, Mercurius 11)

Certainly the crop circle phenomenon has acted to unmask many issues in folk belief. So many of the processes that are often obscured have been left naked in the quest to understand the phenomenon. It is these processes, the use and selection of evidence, the rhetoric of the questors, the relationships between the explanations, to which I turn in the concluding chapters.

Chapter 4

Explanation, Rhetoric and Tradition

Introduction

This chapter takes a step back from the previous one and considers the crop circle explanations in terms of the discourse they have engendered. In the last chapter various beliefs about crop circles were presented within the context of certain explanations. Now I wish to move on and consider the various ways in which those explanations are maintained, justified and disseminated. To do this I present synchronic and diachronic perspectives on the various crop circle explanations.

Synchronically, the crop circles phenomenon has engendered a discourse

that can be seen as centered around the competing explanations. This discourse is motivated by the proponents' desires to justify their explanations and to invalidate the explanations of others. This is the rhetorical aspect of the phenomenon alluded to earlier. The previous chapter presented the various explanations as contemporary phenomena, as supraindividual systems of belief; this one analyses the various extant strategies by which the explanations are differentiated and by which their unique identities are maintained and justified.

Diachronically, it can be observed that explanations have a history, both in terms of the evolution of extant systems and in the inheritance of traditional ways of thinking. Consequently, this chapter does two things: it books at explanations in a selected number of belief traditions and demonstrates the similarities they bear to the explanations for the crop circle phenomenon, and it gives an exposition of the evolution of the cereological explanation over the last decade. There are many more examples that could be chosen and much more detailed analysis could be done, but that would be beyond the scope of this thesis. Instead I wish to demonstrate the utility of considering crop circle beliefs in the context of their associated explanations. As ever, this is intended to be exemplary and not definitive.

4.1 Circular Rhetoric

The previous chapter provided the meat of the explanations, this section books at how it is served up to the public and to other circles researchers. To do so I shall examine a few of the rhetorical strategies that are currently in use, Firstly, I book at onomastic issues, demonstrating that the various terms for crop circles and the style of names used for them are the result of various rhetorical strategies that allow individuals to declare their commitment to an explanation by the simple means of their choice of such terms. Secondly, I look at the appeal to scientific legitimacy, a strategy used to a greater or lesser extent by all of the main explanations. Thirdly, under the rubric of the rhetoric of disbelief, I look at particular strategies used to invalidate others' explanations in the light of the research into traditions of disbelief. Finally, although not a major part of the discourse, I look at some of the uses of humour by individuals.

One could also claim that the selection and use of evidence constitutes a major rhetorical strategy. This is a valid point but I wish to consider that aspect later in parallel with Kuhn's findings of the co-emergence of theory and fact in scientific discovery. In practice, rhetoric and ideology are inextricably intertwined, but for the purposes of this thesis it is convenient to deal with issues in the use of evidence separately.

¹Compare this also to the discussion of the appeal to science by folklorists, discussed earlier.

4.1.1 When is a crop circle not a crop circle?

This is the 'circles effect', a previously-unrecognized phenomenon in which neat geometrical patterns appear in farmers' fields as flattened circles and rings with sizes ranging from the diameter of a cartwheel, to that of a circus arena. (Meaden, Circles Effect 9)

Throughout his book, and in all of his other publications, Terence Meaden is very careful not to call the subjects of his study "crop circles". Sometimes he describes them as "circles effect traces", at other times "cornfied circles", and, more normally, just "circles". This apparently minor point indicates a particular perception of the phenomenon. Meaden wishes to emphasize the primacy of the circles effect: in this case the descending plasma vortex. Conversely, cereologists, despite occasional flirtations with terms such as "agriglyphs", prefer to describe the formations as "crop circles". Thus its someone describes a flattened area in a cereal crop as a "circles effect trace" their theoretical standpoint immediately becomes clear. The name used by the researcher's own beliefs.

Parallels to this abound. Perhaps the most obvious recent case can be seen in the debate over the name of the local government tax introduced by the British Conservative government in 1987. The government termed the

See Noyes, "Crop Circles — Is there a Paramormal Factur?" for a discussion of suggested terms. The next chapter discusses the way in which the various explanations relimit what can and can not be a crop circle and this is reflected in the rhetoric discussed here. Suffice it to say, for now, that to cereologists crop circles are defined as occurring only in agricultural crops (Noyes, "Paramormal" 2).

tax "The Community Charge", but opposition groups immediately dubbed it "The Poll Tax". These two terms reflect the users' conception of the tax and by the use of one of the two terms one could declare one's allegiance. The widespread dislike of the tax spread the term "Poll Tax", and most local councils found it necessary to use that term in some manner to properly identify the subject on the tax-collection demands; councils run by opposition groups would use "Poll Tax" as the primary name for the tax where as non-opposition groups would try to stress "Community Charge" as much as possible. The success of the "Poll Tax" name can be seen in the fact that eventually even government ministers would make mistakes and call the tax "the Poll Tax" under questioning, usually to howls of delight from the opposition. As with "crop circles" and the "circles effect traces", a simple issue of rhetoric can carry enormous connotations. Similarly to the "Poll Tax", the simpler "crop circles" seems destined to carry the day, the term "circles effect traces" now being largely used only amongst those few physicists interested in the mystery.

A similar battle is emerging over the use of the term "pictogram" to describe the more complex formations. Pat Delgado describes how he chose the term after entering the formation at Chilcomb Farm for the first time.

This was a massive leap forward in displayed phenomena and it was impossible to absorb all the implications at the first visit. We were no longer dealing with just circles and rings and it was important to find a word that gave some idea of what we were looking at. I telephened the British Museum, thinking 'hieroglyph' might be the word to use, but was informed that this is used in reference to carvings on stones and that the word 'pictogram' would be more appropriate. Hence from that day onwards every crop formation of intricate design has been termed a 'pictogram'. (Latest Evidence 25)

This term is widely used by cereologists but it is being resisted by meteorologists. For example, throughout The Crop Watcher the term is used only
in inverted commas (2: 6, 30; 3: 21). Again this apparently simple choice is
reflective of world-view, for "pictogram" not only implies communication but
suggests that there is some kind of qualitative difference between crop circles
and the pictogram formations. Consequently, to cereologists the pictograms
are the most important recent development in the evolution of crop circles.
The Today newspaper captioned its first exclusive aerial photographs of the
Alton Barnes formation as: "They've even learned joined-up writing!" Furthermore, the refusal by meteorologists to use the term pictogram is attacked
by some cereologists.

The circles, and this year's pictograms, (a word which I know offends Randles and Fuller because they give it inverted commas) display a geometry...(Glickman 16)

The meteorological stance is equally clear; Paul Fuller steadfastly maintains that there has been no evolution, that complex formations have been occurring throughout history and that therefore there is no need for a new

³ Today 19 Jul. 1990: 2-3. It should be noted that the newspaper has exclusive rights to the work of Collin Andrews and Pat Delgado and tends to echo a cereological viewpoint in its reporting of the phenomenon.

term. So, through their use and choice of terminology, the two schools of thought further illustrate their dissimilarity.

Moving beyond the simple use of terminology we can see a similar rhetorical standpoint in the attitude of the various circles researchers to the ways in which circles are named. Originally the formations were named as a method to identify types, such as doublets, triplets, single-ringers, quintuplets and so on. However the discovery of steadily more complex formations has lead to more fanciful names which are generally only used by cereologists. For example, the formation composed of a quintuplet with a ring linking all four satellites has become known as a "celtic cross" (figure 4.1). Similarly one formation is known as "the crucifix" (see also figure 4.1) and there is the famous Winterbourne Stoke "Swastika" of 1989. The 4.19 and there is the famous Winterbourne Stoke "Swastika" of 1989 the sof these terms tends to imply some type of causal link between the ancient symbols that they represent and the circles phenomenon, consequently such terms have been resisted by non-cereological researchers.⁵

The increasing sophistication of the discovered formations has lead to two different onomastic processes. The first has been an increasing tendency to personify both the formations as well as certain cycles of formations. For ex-

¹The point is quite subtle and may be revised in the light of Meaden's latest publications. Basentially, Fuller's explanation is that although changes in agricultural practice, and possibly climate, may be making circles more common and rang be making it easier for complex formations to occur there is no evolution in the complexity of the circles effect: the plasma vortex.

See Busty Taylor's commentary to his photographs in Enigma. The most detailed attempt to link circle shapes with ancient symbols is Michael Green's "The Rings of Time."



Figure 4.1: Three types of crop circle formation It should be noted that the 'crucifix' formation is thought by some, mostly the meteorologists, to consist of a chance alignment of a quintuplet formation with a simple circle for the three supposedly in-line satellites do not actually combrise a straight line.

ample the three first pictograms appeared at Cheesefoot Head between May 23rd and June 16th. According to Wingfield the three formations represent a move from incompleteness, through the "sad, damaged" ⁶ "Gaia" formation, ⁷ to a triumphant affirmation of rebirth and completeness with the "phoenix" pictogram. ⁸ Which is to say that many cereologists saw a theme of movement, from incompleteness to fulfillment, expressed in the three pictograms.

As well as these more dramatic names have come jocular nick-names.

The giant formation at Bishops Canning in May 1990 is widely known as

"Big Bertha", due to its size. A more complex example comes from a simple

⁶Delgado's description, Latest Evidence 35.

⁷Michael Green's term: "The Rings of Time".

⁸Personal communication from George Wingfield

^{*}Personal communication from George Wingfield. Pictures and descriptions of all three can be found in Degled and Antherws, The Letter devidence 22 32, 34, 35, 39, 32 ergentively. Photographs also appear in Enigna, p.95 for the first and p.113 for the last. A photograph of the first pictogram appears on page 45 of this document. The interested reader is best advised to put the three photographs side-by-side in order to come to an understanding of the postulated symbolic relations.

pictogram found at Alton Barnes in a field separate from the famous doubledumb-bell formation. This one features a simple circle with what looks like an arm and three-fingered hand attached to it. A few metres from the termination of the "hand" is a small single circle: illustrated in the photograph in figure 4.2. This formation is known by some as "The Hand of God" for two reasons. Firstly, it appears to match a part of the complex formations that is sometimes known as the circle-makers' signature, only in this case it is presented by itself.9 Secondly, it is a reference to an occurrence during a soccer match played by the English team against Argentina in the 1986 World Cup. During this game, the Argentine player Diego Maradonna scored an illegal goal by using his hands to hit the ball into the net and, inexplicably, the referee did not see the offence. England eventually lost the game by a single goal and, when asked about cheating afterwards, Maradonna claimed to have been helped by the "Hand of God," Photographs of the illegal goal and Maradonna's quote were headline news in England; it should be remembered that this was the first time the two countries had played each other since the Falklands/Malvinas conflict. This quote and its context has become a part of English national folklore, and the pictogram does look remarkably like a top view of a soccer player jumping up to hit the ball with his hand. Hence

[&]quot;The small ringed circle appears at one end of quite a few of the complex formations and wis referred to an asignature, bush Taylor refers to ten complex formations (Estignation 118), and Colin Andrew' catalogue of types give 3 formations in which is occurs (Choreat, "Thenis" types 3, 435, 54). Andrews does not include the pietogram at Stratton St. Bernard (see figure 1.4 in this thesis) in which the "signature" circle can be seen at the top of the formation.



Figure 4.2: The "Hand of God" pictogram at Alton Barnes

the nickname.

It perhaps goes without saying that this type of naming does not occur amongst proponents of non-cereological explanations: meteorologists are trying to couch their theories in the terms and rhetoric of science¹⁰ whereas hoax theorists tend to describe circles as looking like fictional spaceships or meteorological symbols, thus implying a human agency behind the circles creation. Amongst the general public the only term in use is some variant of "crop-" or "corn circle". Although I have had several people comment on the fact that the first Chilcomb Farm pictogram looked like the "Starship Enterprise", betokening, perhaps, individuals who hold the hoax explanation, I

¹⁰ Generally they use the location of the formation as the means by which to identify it.

have not seen any evidence of other types of consistent naming. This would seem to support the contention that such naming is rhetorical device used in crop circle discourse, although it is also constitutive of world-view: after all, only if one sees meaning in the placement and structure of the formations is one able to apply names to the shapes, or themes to the relations between the shapes.

4.1.2 When is a scientist not a scientist?

Well I'm a scientist. I have a science degree and I've always viewed things in a scientific manner. (Wingfield, tape-recorded interview. Rev. 2-5. side 1.)

George Wingfield's quote is highlights one of the rhetorical strategies that the proponents of the various explanations use to gain legitimacy for their views: the appeal to science. When I first talked with Mr. Wingfield I explained briefly what I was doing and, switching on the tape-recorder, I asked him to describe how he came to be involved with crop circle research. The quote above was the first thing he said. Yet, Wingfield is one of the leading proponents of the cereological school of thought: he believes that, amongst other things, channeled messages from psychics are useful in an understanding of the problem ("Beyond" 101). Surely this is the very antithesis of "science"? Presumably Terence Meaden has the likes of George Wingfield in mind when by writes:

Such people fail at the starting point through an ignorance and by an arrogance by which, although they know nothing of physics and scientific methodology, they choose to reject those very disciplines upon which the world's great scientific and technical achievements are based. ("Remarks" 18)

When Paul Fullersays to me, "You should watch out though, there are people out there who are out-and-out liars", he would seem to have the cereologists as his target. How then can George Winglield claim to be a scientiat? The solution to this seeming paradox is not that Mr. Winglield lied to me, that he is mentally incompetent, or that he has no idea of what "science" is, but that he is taking a rhetorical standpoint. To him, "science" is the minisced exploration of an anomalous phenomenon," a view of the goal of science that I am sure Terence Meaden would happily endorse. Ironically, according to Wingfield it is Meaden who is not the scientist.

Dr. Meaden, who is meant to be a scientist, has never at any stage published any, figures, equations, rotational velocities rates of descent anything of this kind, to justify his present vortex, how it forms or how it operates or, how it acts. No figures. What he appears to have done is he's taken what

people used to call a UFO and called it a plasma vortex. Oh well I don't think that's particularly scientific and it doesn't make us

we're no further along. (Tape recorded interview, rev 305-309, side 1.)

It is useful to oppose Meaden's and Wingfield's views on his subject because this is so often done by others. The CCCS anthology, Enigma, printed

¹¹ See for example his remarks in "Beyond the Current Paradigms".

articles on the circles effect by the two researchers side-by-side;¹² the Independent newspaper's "Free Speech" column did likewise. Essentially both researchers are claiming that their standpoint is the rational one.

Meaden's strategy is two-fold. Firstly, he dismisses the cereological belief that some type of intelligence directs the circles effect:

This sort of suggestion — typical of non-scientists — is an entertaining diversion but a wild guess nevertheless. Its supporters arrogantly reject the applicability of physics upon which our technological civilisation is based, and prefer instead to devise a pseudo-scientific nonsense drawn from the pages of science-fiction writers. ("FPCS Speech")

Secondly, he draws on the notion of a scientific community of physicists, the same ones responsible for "our technological society", and asserts that they are the ones who will solve the mystery.

Following the success of the Oxford conference on circles a month ago, steady progress is to be expected as more professional scientists apply themselves to this intriguing problem. ("Free Speech")

The rhetorical standpoint of those involved with the meterological theory is less transparent in Paul Fuller's *The Crop Watcher* journal, which openly adopts a satirical viewpoint. This journal concentrates almost exclusively on what can be seen as the rhetorical argument — for instance it constantly prints lists of scientists who back the meterological explanation and letters of support from the scientific community. See 15 saue 3 introduced an article by

¹²Meaden, "Crop Circles and the Plasma Vortex"; Wingfield, "Beyond the Current Paradigms".

¹³ Crop Watcher 1 (1990): 27-28, 2 (1990): 7, 3 (1991): 22-23.

David Reynolds giving an introduction to vortices, their classification and production ("Whirlwinds"), but the main thrust of the journal consists of responses to attacks on the meteorological explanation. In his foreword to the first issue Puller writes:

Our task will be to challenge the views and theories being expressed by many of the self-proclaimed crop circle experts and to examine the way in which the media portray the subject as a supernatural myth. (3)

In a sense this journal does the "dirty work" for the meteorological theory. The contributors to The Crop Watcher attack other explanations, ¹⁸ present evidence favourable to the meterological explanation, ¹⁸ satirize opposing standpoints, ¹⁶ and promote the meterological explanation as the scientific theory. ¹⁷ This leaves Terence Meaden free to espouse the technicalities of the explanation with clean hands; he has nothing to do with the journal. This is not to imply that the The Crop Watcher is some sort of conspiratorial undertaking, but that it happens to show, in a very clear way, the rhetoric of the meteorological explanation. ¹⁸

In response to this two-fronted attack on the scientific nature of the cereological theory, cereologists have taken several standpoints. However there appears to be one metaphor that is associated with most, if not all, of these

¹⁴ The Crop Watcher 1: 4-7, 22-26; 2: 23-28; 3: 13-14, 18-21,

¹⁵ The Crop Watcher 1: 29-30; 2: 9, 14-19.

¹⁶ The Crop Watcher 2: 29.

¹⁷ The Crop Watcher 1: 27-28; 2: 4-6; 3: 22-23.

¹⁸In recent issues, (4 and 5), The Crop Watcher appears to have become less polemical in tone.

positions and that is the concept of an "open mind". The rationale behind this varies by researcher. Wingfield suggests that:

There are a number of people like um, Randles and Fuller, and, their chuns who hade circles they hate UFOs, and they, their psychology demands that such things don't exist or else they have to be, plasma vortices or something of the kind. (Interview, September 1990, rev 414–422, side 1.)

The implication here is that the researchers in question lack the necessary scientific objectivity. As such, Wingfield is questioning the competence of the researchers in an attempt to invalidate their explanation. This is a common rhetorical strategy, it is used by proponents of all the differing explanations, and I return to this point in more detail later.

George Wingfield's position seems to be that although the crop circles phenomenon is not wholly within the field of orthodox science, it is still possible to use much of the insights of that approach in an understanding of the phenomenon. This can be seen as one end of a spectrum, at the other end of which are those who totally reject the scientific approach. These include the likes of John Michell, who proposes a more contemplative, passive research technique.

Cercologists, in seasons to come, would surely be best advised to forget any conclusions they have jumped at and to make a fresh appraisal of the whole phenomenon through the evidences of itself which it has chosen to present. If Nature is speaking through the crop circles, the most fruitful response is to be still and listen. The ideas which steal into the mind as one contemplates these

wonderful patterns are likely to be the very ideas which they are designed to convey. ("What Mean?" 59)

There are also those who appear to reject the whole culture of science and "our technological civilisation", and for such people the whole concept of applying scientific methodology is both meaningless and possibly dangerous. Michell alludes to this when he likens the obsession with explaining cropcircles to guests who would watch Belshazzar's finger trace its message of doom and then fall to arguing about how it was done instead of heeding the warning on the wall ("What Mean" 48). Thus, according to this view, science misunderstands the meaning of crop-circles, their most important part, because scientists minds are closed.

Not only is science portrayed as fundamentally failing to understand the crop circles because it is not open-minded enough, but it is also accused of failing even in its own terms. Thus Peter Hewitt writes:

What is science? Theory, Experiment, Prediction, But scientists haven't been able to do any experiments. And they haven't got any sensible theories. But I have a theory. And a prediction. The circles will cease. And when they do, perhaps my theory will be accepted. That's science isn't i?; Créssmic Graffiti' 14).

Similarly, in his analysis of Crop Circles: A Mystery Solved, Michael Glickman uses the authors' adherence to Meaden's theory as a method to invalidate their book.

The circles have been seized upon gleefully by so many simply because, as yet, scientific convention, which Randles and Fuller claim so pompously to represent, is stumped. (16) The above criticisms relate to the "closed-mind" nature of scientific inquiry; some cereologists have also tackled the meteorologists claim to belong to the scientific community. Kingsley points out that the list of meteorologists who support a meteorological explanation is not as convincing as it appears." Patrick Harpur takes a different approach when reviewing Meaden's exposition of the meteorological explanation in The Crop Circle Enigma and ridicules the very idea of any kind of scientific consensus.

The theory must be right because other scientists agree with him (my italice; our surprised murmurs). Not since the 19th century, when scientists agreed that the universe could be explained by next Tuesday, have we been treated to such a robust and confident discourse. ("Oro Circle Banquet" 15)

The above represents a major attack on both the meteorological theory's claim to scientific legitimacy as well as the very existence of such a legitimacy. There is no doubt, however, that, on the whole, there is a great folk belief in the efficacy of science and technology. Time and time again I encountered statements of the nature of: "Well I'm sure there's a scientific explanation," "I can't say for myself but I expect there's a scientific answer," "Isn't the scientific explanation something to do with the wind?" It is belief that seems to run throughout society: from the young, uneducated male labourer on page 141 who asserts that science can explain the parting of the Red Sea and, therefore, why not the crop circles; to the elderly, highly educated bookstore

¹⁹Sec The Circular 2 (1990): 24. This point is raised again in the light of comments from Paul Fuller in The Circular 3 (1990): 24.

owner who said:

I suppose no one really knows. If they're supernatural it just means we don't know how to describe them. In the past people used electricity and magnetism without knowing how it worked. That was supernatural. So I suppose they have to be supernatural. (See page 144)

There is another view that implicitly rejects scientific values, and blames science and technology for the current state of the planet. For example, there was the dowser's companion who stated that she thought the crop circles were a warning about the over-use of pesticides (see interview on page 171), and the optician who stated that "there's so much fucked up with this world it seems only natural that someone's trying to warn us," (Page 174). Whether this anti-scientific belief is on the increase, as a great many skeptics seem to think, is difficult to say. There is a long history of belief in UFOs as a means of salvation (see, for example, Festinger, et al. for their description of a small group who believed they were about to be "saved" by spacemen in flying saucers in the mid-50's), and the existence of crop circles in agricultural crops is held by some to imply that the circles represent an ecological message of some type: perhaps indicating a continuity of belief in the efficacy of the supranormal. All I can state is that amongst the ordinary people I interviewed, as opposed to many of the circles enthusiasts, there was an implicit belief in the goodness of science.

Consequently there seems to be great deal to be said for claiming that your theory is "scientific". So, for example, Meaden says in his review of

Cory's explanation:

In fact one might add that his is the only idea, besides my own suggestion of a descending electrified vortex, which can be said to rise to the status of a scientific theory. ("Remarks" 18)

Yet Cory's theory was found totally wanting. The author had not conducted the simplest test of his sprinkler hypothesis, determining whether such machines actually existed. He had not carried out experiments to determine whether such a mechanism could produce similar results under controlled conditions, nor did his theory even begin to explain the most rudimentary of crop circle features. In short, as a theory, it failed every criteria used in the evaluation of a scientific theory. Therefore, how can Meaden claim that it is the most scientifically valid theory, after his own, to have emerged? In terms of detail it compares poorly with any of the fieldwork done by the experienced cereologists. The only answer is to observe that Cory's theory is couched in scientific rhetoric, and it is this which motivates Meaden's comments.

David Fisher's review of the circles phenomenon gives a skeptical analysis of the scientific legitimacy of the meteorological and cereological explanations. For him, both are found wanting and he is particularly hard on the meteorologists, after making an a priori dismissal of anything the cereologists might have to say. Instead he notes that:

The current circle-situation recalls the one which existed when Uri Geller was at the height of his spoon-bending fame. That is, some experts talked of a new phenomenon (the mystical approach) and some suggested that chemical agents might produce the (Rehbinder?) effect; the scientific approach...the reviewer will apply Occam's razor and vigorously champion the 'null option' (fraud) which proved to be so pertinent to the Geller case.

To do this he uses the same rhetorical tools as the cereologists. First, he casts doubt on the "skepticism" of the various circles researchers, in this case equating skepticism with scientific legitimacy. So he claims Randles and Fuller:

...are really obscurantists: they adopt an open-minded stancthe better to make even conventionally explainable phenomena seem mysterious. It is well-known that Randles, while claiming that little green men' are no longer on Bufora's front burner, is herself not slow to use them to explain mysterious dumpings of dead bodies.

In Fisher's view Randles' credibility is in question because she has, in the past, given written support to some facets of the ETH. He deals with Terence Meaden by casting doubt on the scientific nature of Meaden's other research and comparing him to Pat Delgado and Colin Andrews.

Meaden's other 'hats' are obviously his editorship of Journal of Meteorology (J of M) and his directorship of TORRO. This should also cause some miggivings among skeptics, for Meaden seems to be as singlemindedly intent on finding a meteorological explanation as Delgado and Andrews] are in seeking a mysterious one. At times, this seems to impair his objectivity. It must also be noted that the J of M is somewhat of a fringe publication and, during its post-1976 existence, papers from it (often written by non-meteorologists such as Colin Andrews and Stenart Campbell) have been quoted less than a dozen times by its peers.

Fisher's analysis is couched purely in the rhetoric of skepticism and he uses he the common technique of damnation by contamination; that is to say, once some researcher is shown to have ever supported some 'non-skeptical' theory, the rest of their work becomes suspect.\(^{70}\) That said, the essay is useful in that it demonstrates the common rhetorical framework on the battherround of science.

4.1.3 The rhetoric of disbelief

Hufford's ground-breaking work on the "Old Hag" tradition led him to posit the existence of "traditions of disbelief" and particularly the "cultural source hypothesis" (CSII).²¹ In elucidating the CSII Hufford isolates six standard arguments that are used by its proponents to explain accounts of anomalous experiences. I wish to propose that these arguments can be seen as rhetorical strategies that are available to proponents of any explanation and that they can be seen in action in the current crop circle discourse.

The discourse engendered by the crop circle phenomenon is centered on the origin of the circles, on questions of how and why the circles are formed. This immediately places it in a different category from many other supernatural belief traditions in which the discourse is ar much about whether or not the phenomenon exists as about the explanation for it. That said, Hufford's

b"I am not aware of any specific analysis of the chetoric of "skepticism", though Hufford's "Traditions of Disbelief" is useful. Abell and Singer's Science and the Paranormal has several articles that explain the skeptical viewpoint and it does make a good introduction to the subject.

²¹See for example Terror 12-46, "The Supernatural", "Traditions of Disbelief". This point picks up from the earlier discussion in chapter 2.

six points are still illuminating and I deal with them in order here.

Personal experience narratives do not exist in their current form.

Narratives that claim to be personal encounters with the phenomenon are in fact artifacts of the tradition associated with the phenomenon. This argument can be used in two forms: either the percipient interprets their experience in terms of a tradition of a belief (that is, instead of stating that he or she saw "lights in the sky", the statement is that he or she "saw a UFO"), or in the constant telling of the memorate, and during its transmission and evolution into other narrative genres, the experiences become interpreted according to a cultural tradition of belief. Generally, the concept is that a memorate becomes more fabulous as time goes by and that the initial experience becomes exaggerated. In the crop circle phenomenon this argument has been most often be used against eye-witness accounts of the formation of crop circles.

Cereologists have taken this tack in their attempt to deligitimize the ever expanding list of eye-witness accounts of circle formations. Thus Bob Kingsley's point:

The constant insistence, made this time by scientists instead of UFO cultists, that what is being seen is a worter, may prepare those who have come into contact with this idea through the media to expect to see just a thing. (The Circular 1.3: 25. Italics Kingsley's.)

This is clearly a case in which it is asserted that the personal experience

narrative is shaped to conform to a tradition of belief. In this case the tradition in question is the meteorological explanation. Paul Fuller reposts by posing the question, "why does no one see UFOs creating crop circles?" (Editorial, 3: 5).

More usually though the meteorologists appear concerned to cast doubt on the memorates of encounters with the circle makers or accounts of anomalous events within crop circles. For example, Terence Meaden recounts with a measure of glee, the immediate reaction of Pat Delgado when he entered the hoax circles at Bratton.

... upon entering the field Delgado threw his arms wide in spiritual fashion as he responded to the 'vibrations' and 'energies'. Then as Colin Andrews reached the centre of the circle Andrews yelled out. "We've been had!", for had found the first of the toy ouija boards with crossed sticks on top. ("When" 380.

In this case Meaden is implicitly arguing that not only does the tradition shape the memorate but actively effects the event as it occurs. The implication is that if Delgado can mistakenly respond to the "energies" in a hoax circle then his reactions to the "energy" in genuine circles must be doubtful in the extreme. So, as a rhetorical tool this argument can, and has been used to, cut both ways.

Eye-witness accounts can be explained as misperceptions.

Eye-witness accounts may be no more than an account of an individual misperceiving some mundane object, perhaps in an unusual context, and labelling it as something anomalous. This argument is used in many ways by circles researchers

Cereologists argue that accounts of crop circle formations pre-dating the modern era are being mistakenly assigned to the current phenomenon. They argue that wind-effects can cause roughly circular areas of damage in fields and that these mundame areas of damage are being misperceived as crop circles in the light of modern publicity. Similarly, they argue that whirlwinds do occur and that some individuals have, on seeing a whirlwind or — iilar phenomenon, mistakenly linked it to a nearby circle, consequently mista. • ga a mundane atmospheric phenomenon for the circles effect. This point is also made by David Fisher. Thus both hoax theorists and cereologists, prime examples of the holders of traditions of belief and dishelief, use the same argument to invalidate a category of evidence.

This can be said to be the major rhetorical tool for the hoax theorists, for if all crop circle are caused by hoaxers then other circles researchers are misperceiving mundane occurrences for something more exotic. Anyway, as David Fisher says:

Eye-witness accounts would clinch the matter for non-skeptics. Meaden's book even has a section (2.1) devoted to the value of eye-witnesses; but a skeptic knows that this value is zilch.

This point is echoed by Bob Kingsley, a cereologist, who points out that eye-witness accounts are inherently untrustworthy due to the inability of observers to correctly remember what they saw.22

Some accounts are outright lies or errors of memory.

Given the existence of libel laws this is the most dangerous claim to make. Whereas the previous point takes sincere misperception as an argument against the validity of eye-witness accounts, in this case doubt is cast on the veracity of the teller. This strategy was incautiously used by Colin Andrews when he refused to accept a narrative from Melvyn Bell that appeared to give strong support to the meteorological explanation, because of Bell's links to Terence Meaden.²³ More generally, circles researchers are constantly levelling accusations of duplicity against each other. Paul Fuller and Jenny Randles have been described as "monumental and egregious liars" but are capable of giving as good as they get.²⁴

Some percipients are victims of hoaxers who have used the tradition as a model.

This is, of course, the basic theoretical standpoint of the hoax explanation. For instance a certain group drew on the UFO tradition to construct a

²² Kingsley, The Circular 3 (1990): 24. This untrustworthyness of eye-witness accounts is a major part of skeptical thinking. See for example Abell and Singer, "the most remarkable advances of science are characterized by science reaching beyond or even contradicting our ordinary senses and intuition," (23).

²³ Andrews later retracted, claiming that he was ambushed by the interviewer. See Randles and Fuller. Musters Solved 76-80 for an account of this.

²⁴ For good examples of this see any of Paul Fuller's editorials in The Crop Watcher.

fake "saucer nest" (a circular depression in grass or cereal crops) during the Warminster cycle of UFO reports (Fisher). After that series of encounters died away the hoaxers were quiet until some simple circles, possibly even mundane circles, were interpreted once again as UFO landing marks in the early eighties. Since then there has been, supposedly, a mutual relationship between the shapes created by hoaxes and the evolving tradition as reported in the media. Similarly, Paul Fuller suggests that the few encounters with the circle makers may be the result of individuals tricking the circles researchers (Editorial, 2: 6-7).

Some encounters are caused by activities known to cause powerful subjective experiences.

This is the main argument that the meteorologists use to assert that plasma vortices can cause UFO encounter reports. The basic position is that a distant encounter with a vortex will lead to reports of lights behaving strangely in the sky and a close encounter will lead to neurological trauma that is interpreted according to the UFO tradition (Randles and Fuller, Mystery Solved 164-177). This argument is also used against those accounts in which individuals have tried to summon circle makers or cause a circle.

Proponents of the skeptical explanation make great use of this argument, especially concerning alcohol and drugs. The relation between drunkenness and crop circles is complex. Unlike 'normal' anomalous phenomena, one can not argue that anyone who has seen a crop circle must have been drunk or "on drugs". Instead drunkenness is often given as a reason for why hoaxers would make circles. This is a theme that ran throughout the various beliefs I collected and is especially prevalent amongst those who hold a hoax explanation. 25 Again, Paul Fuller recounts:

At Alton Barnes people even camped inside the circles mischeviously flashing torch lights and taking drugs whilst the more restrained circle watchers stood around getting cold on the surrounding hilltops. (Crop Watcher 2 (1990): 7.)

It is almost as if there is a double invalidation occurring: not only are the circles not caused by anything out of the usual, but they are caused by drunkards and druggies, implying perhaps that crop circles are of absolutely no interest, hence perhaps PM's question to me, "What the fuck do you want to know about them for?" (See page 197.)

Some events are the experiences of abnormal individuals.

This is possibly the implication of Paul Fuller's words when in reviewing The Latest Evidence he says,

Pat and Colin are very lucky men. They have an uncanny knack of being in the right place at the right time when it comes to experiencing "energy fields", odd noises, camera defects and alien possession. It only seems to happen to them or to their collaborators. (19)

³⁹See interviews on pages 137, 197, 197, 203, for example. See also the cartoon in figure 3.5 on page 200 where the circles are caused by tabloid-newspaper reporters desperately trying to get out of a cropfield in search of the nearest public house.

Invalidating the experience by implying the untrustworthyness of the percipient is a widely used technique. Paul Fuller, again, thinks that perhaps many hoaxes are done by socially abnormal groups of individuals, such as cultists or the eponymous "hippies." Another example comes in a conversation with a video-store owner (1S) during which I was trying to track down a young man who had claimed to see a circle form.

- BM Do you know anything about the kid who saw a UFO in a circle round here somewhere?
- IS Oh, Peter. Yeah he's in here all the time.
- BM I could do with speaking with him.
- IS Well you can try. He's a bit simple.
- BM Oh.
 - IS Oh yes, known for it. He's always claiming he's got flying saucers at the foot of his garden.
 - BM Do you think the circle isn't a real one then?
 - IS Hard to know, it was harvested straight away. But Peter's just the type who would go out and make one. I expect he would believe it too — poor kid's really not all there.²⁷

This case is unusual in that it refers to someone who actively claims to have seen a crop circle created. There is a more general folk use of this type of rhetoric to invalidate those people who hold alternate views. For example SE, a believer in the hoax theory, when asked why his father believed that alien spaceships were responsible for crop circles commented as follows:

²⁶Personal communications. See also the "Hoaxers' Diary" and "Informed Circles" columns of The Crop Watcher which tends to assign the blame to groups such as "hippies". ²⁷An earlier part of this conversation is given on page 177, above.

SE Oh well. He's really into all that stuff.

BM Um?

SE Science-fiction, flying saucers. He really believes in all that.

BM Not you then.

SE Fuck no. Still I guess, if you want to believe in it it don't do no harm. (See interview on page 197.)

Similarly, a believer in the alien spaceship hypothesis argued that the type of people who disbelieved in the ETH were the same kind of people who believed that the world was created 6,000 years ago.

Some people don't believe in evolution. They still believe that the world was created. That's religion so maybe that's different. But the evidence all points the other way. You can't ignore all that evidence. Some people do, but people will believe anything if they don't think about it. (Interview starting page 178)

In this case the implication is slightly more subtle in that it accuses those not believing in the ETH of having abnormal views and links them with creationists, presumably for this person, an abnormal group of individuals.

Rhetoric and disbelief

The various strategies Hufford assigns to the CSII appear to be specific cases of a more general strategy of rhetorical disbelief, and they are used by all types of believers. One can see them more generally as methods for invalidating the beliefs of others, by either invalidating their evidence or invalidating the individuals. The crop circle phenomenon provides a clear example of this because of the use by the meteorologists of personal experience narratives as

evidence, a type of evidence more normally seen in supernatural explanations

More generally it appears to be the case that personal experience is the most highly valued type of evidence used in any tradition of belief. Consequently the personal experience narrative holds the most weight, hence the battery of rhetorical devices to invalidate either it or its teller. The crop circle phenomenon is unusual in that there is no doubt as to the existence of the evidence, but personal experiences of circles forming are almost non-existent and are not widely known. There is, however, a form of such personal experience and that occurs in media demonstrations of how to hoax a circle. These demonstrations have become a crucial part of the evidence used in explanation: amongst circles enthusiasts such demonstrations are held to demonstrate the inadequacy of the hoax explanation, whilst among the ordinary folk they are usually taken as proof of exactly the opposite. For example, the debate presented in the next chapter (page 332) was sparked by one person commenting that she had seen some crop circles made on TV. A more direct example comes from the interviews with EP. In the first one (page 195) she uses what she believes to be a friend's narrative of making a crop circle:

EP I've a friend who made a circle once.

BM You have?

EP Yes. He and a few friends went out into a field to see if they could make make one. He said it was quite simple really they just tied a rope to a post and pushed all the corn over. BM Oh right. Do you think that's true of all of them? EP Oh yes.

Her friend's experience is clearly crucial evidence for this woman. However, as it turned out, his evidence was not quite what she thought and this causes a blow to her beliefs as a follow-up interview shows:

- EP He didn't actually make one he said he had seen it on TV... He said a lot of local farmers did it. They'd decided to do it for a bit of fun to show how easy it was. He said it only took two minutes and it looked like real....
- BM You think they might not be hoaxes?

 EP I can't say. I haven't studied them so I don't really have an

opinion. (Page 209)

From this it can be seen that personal experience of hoaxing, whether it is seen in the media or recounted by a friend, provides prime evidence for the hoax theory. On the other hand the very lack of experiences with circles forming is taken by some as indicative of their mysterious origin. For example

one TV presenter commented, "it's amazing isn't it... the thing that baffles
me about this is, if it was some natural phenomenon, how come it's got these
prefect edges and no one's ever seen them happening either," (page 226).
Another example of this came from an assistant bank manager who said
to me, "well, if they've been around all this time why's no one ever seen

them forming or taken a photo?" ²⁸ In both cases, the lack of such evidence

²⁸May 1990. I was actually applying for a loan at the time in order to buy transport to
carry out my fieldwork on and had explained my intended subject to her, leading to the
ouestion above.

is interpreted as being unusual, enhancing the mystery of the origin of the circles.

4.1.4 Circular wit

To date this has all been a pretty grim business, so it should be noted that humour can be, and has been, used in the ongoing discourse to a greater, or lesser, extent. There have been two main avenues for the expression of humour: satirical prose and cartoons. In both cases the texts have been used by insiders as a part of the inter-explanatory war and by outsiders about circles research in general.

Prose satire

This particular genre of humour is used by both the meteorologists and the cereologists. Essentially the aim is to ridicule the views and activities of the other camp. For example The Crop Watcher used to run a column named "Rumours and Rumours of Rumours" in which various cereologists were ridiculed. The various name games in the example below should be mostly self-explanatory by now, though it does help to know that one senior circles researcher believes himself to be the favoured contactee of the circle makers and that Zirka is an entity that claims, through various channeled

messages, to be responsible for the crop circles.29

Zirka the alien is alive and well and still visiting X John. His granpy was very upset when she was told the aliens were visiting us and that the "food chain" was contaminated by a "molecular change". Zirka's spaceship had an unfortunate accident on the Winchester Bypass when a Black Crow collided with a well known organizer. The Man-in-Black who turned up in the rain has finally been released from prison. ("Rumourst" 1:20.

The Crop Watcher seems to have inspired them to attack in similar terms.

So, for example, The Cropolist parodied the scientific method in a fake review of Zoltan Crunlop's "Crop Circles: The Mystery Solved," and also printed a putative excerpt from it.

The time has come to apply stern scientific reasoning to the phenomenon, and who better to undertake the task than myself...? Is there anyone alive who does not own a copy of my "Propulsion Mechanisms Fuelled by Burned Fish" or "Misery Wild Gravel"...? Realising the need to create laboratory conditions, I bought a large field in Wiltshire which had been the site of well-documented crop circles during the previous two years. I then cordoned off the site by building an invisible force-field around it. (2: 20)

Crop circles have also been used in humorous contexts by people outside of the circles researchers. For example, *Private Eye*, a popular satirical magazine, has a long running feature named "Heir To Sorrows." Written in the style of a romance, it features the quest of the Prince of Wales to find

²⁹ am not sure what the author, presumably Paul Fuller, refers to by the "Man-in-Black who turned up in the rain".

meaning in his life and uses this theme to make satirical comments about the Prince's well-known beliefs as well as a whole host of other subjects. In the story of August 17th the focus was on the Prince's beliefs about nonorthodox healing (his left arm had recently been broken in a fall), his mentor (Laurens Van der Post), and the alleged mystical qualities of crop circles. In an attempt to speed the healing Van der Post takes the prince out to the Alton Barnes formation.

"You see, Charles, in a circle there is no right or left. It is a complete whole. You have put your arm into your shadow self. What we must do is awaken the left arm to restore the whole self. You see... balance, wholeness, oneness..."

The helicopter swooped down, its blade whirring like a giant vulture. "Great!" shouted the photographer, snapping furiously. "Who's the old bloke for the caption? Looks like an alien," he added, with a raucous laugh. 30

The use of cartoons

Finally, this same use of satire is also seen in cartoons, both in specialist publications and in the daily press. Amongst the circles researchers' journals, cartoons have been used to either support their own beliefs or to satirize those of others. Figure 3.9 on page 231 showing Cornelia juggling hedgehogs can be seen as a blend of the two. The central figure has been used in three cartoons now, and is intended to express some characteristics of the circle makers. A more openly satirical cartoon (reprinted in figure 4.3) comes from

³⁴ Sylvie Krin, "Heir To Sorrows." Private Eve 748 (1990): 20.



Figure 4.3: Cartoon: an unusual "plasma vortex"
The sub-text of the cartoon attempts to invalidate the meteorological concept
of the plasma vortex. (The Cereologist 2: 20.)

The Cereologist, in which the view that Meaden has simply renamed the UFO a plasma vortex is expressed.

Unsurprisingly, The Crop Watcher prints cartoons that satirize cereological explanations. For example the cartoon reprinted in figure 4.4 gives an impossible explanation for who the aliens responsible for crop circles might be.³¹

Outside of the community of circles researchers the cartoons about the

³²The use of science-fiction referents has been one of the constants throughout the circles phenomenon, starting with the early association with E-T, "I be commend about circle formations appearing to have the Standip Enterprise as a common motif has been discussed above. Noteworthy also is a comment from a swenes in Circlear Evidence who heard a strange noise "like something out of Dr. Who" it: relation to a UFO sighted near a new crop circle (60).



Figure 4.4: Cartoon: aliens beam up scarecrows
The text is a catch-phrase from the cult science-fiction show "Star Trek"
(The Crop Watcher 1: 12).

crop circle phenomenon take on a different slant. On the whole these cartoons tend to satirize any non-hoax explanation, such as the "Greetings from Planet Beadle" cartoon reprinted in figure 3.1 (page 106). The clearest example I found of this is reprinted in figure 4.5. In this case the eye-witness has, with comic results, misinterpreted a "mundane" event as something extraordinary.

Although this is only the briefest of overviews it should be clear that although it is not necessarily so, it is possible for humorists to use an explanation as a source of humour, whether in prose, cartoon or other form. It should also be noted that many lectures on the subject often end up with a cartoon of some sort being displayed on a slide-screen as a piece of comic relief. Circles researchers are not without a sense of fun.



Figure 4.5: Cartoon: sex, aliens and crop circles
This cartoon appears to be from *The Sunday Mirror* but I do not have a precise reference. It was also reprinted in *The Circular* 1: 30.

4.2 Explanations and Tradition

The previous section of this chapter examined crop circle explanations synchronically, studying the discourse as it is laid out at the present moment. However, it is also the case that much of what is happening today appears to have its roots in the past. Without trying to trace the evolution of the crop circles discourse, if for no other reason than the perceived nevelty of the phenomenon is an important part of that discourse, it is useful to look at explanations in other belief traditions, for this demonstrates that both the types of explanations and their relationships to each other are remarkably similar in case after case. To do this I will give a brief overview of explanations for two related belief traditions to crop circles (fairy rings and saucer nests) as well as those engendered by a unique event at Bell Island, Newfoundland.

4.2.1 Some explanations for similar belief traditions Circles and fairy rings

Given that there is some confusion between fungal fairy rings and crop circles, it is enlightening to look at some of the explanations for the former. The best starting point for such a discussion is the work of the natural philosopher, Robert Plot.

In 1686 Robert Plot published his Natural History of Staffordshire a part

of which consisted of a discourse on the possible origin of fairy rings. He mentions various of the possibilities that had been proposed for their origin. including animals, witches and fairies, but later rules them out in favour of an explanation involving the impact of lightning on the ground.

And here perchance by the way it may be no great digression to inquire into the nature and efficient cause of those rings we find in the grass, which they commonly call "fairy Circles": whether they are caused by lightning? or are indeed the rendezvous of witches, or the dancing places of those little pigmy spirits they call "elves" or "fairies"? (9)

It can be seen that the three explanation Plot entertains are analogous to the three main explanations for the crop circle phenomenon: viz. the meteorological/scientific explanation (lightning), cereological/supernatural (fairies and elves) and the hoax/human origin (witches). Furthermore, Plot's grounds for dismissing the non-meteorological explanations are totally parallel to the ones discussed earlier in this section for crop circles. When dealing with witches, he notes that there is evidence that wizards and witches dance in circular patterns during their rites (9–12) and provides an account of such an activity.³² He also points out that supernatural spirits do likewise and although his faith "be but weak in this matter," he does allow that a small minority may be caused by such agencies. Plot also deals with other explanations, such as that the rings may be caused by rutting deer, the working

³²This account, featuring people dancing in a crop field and unusual whirlwinds, is claimed by David Reynolds to be an early example of a crop circle caused by a plasma vortex ("Possibility").

of "moldwarps", the dung of cattle excreted as they lie in a circular group or by water. All of these he surmises could be capable of causing rings of sorts, but he notes that these explanations do not fit the available evidence: the size of the rings, the ability of the rings to run through hedges and ditches and the strange composition of the soil beneath the rims of the rings (14-15.) Given all this he concludes, "it became equally plain that I was no longer to inquire for the origin at least of these larger circles, either from any thing under or upon the ground," (15).

Plot's exposition of his theory is strikingly similar to that of Terence Meaden's. First he concentrates on the method by which lightning is released from the clouds and observes that these various means seem to be echoed in the shapes of the fairy rings (15-16). He then notes the effects of the lightning on the ground and concludes that it causes a sulphurous reaction in the soil, leading to its changed composition (16-17). Finally he postulates that this can lead to the change in the colour of the affected grass and its fecundity (17). Essentially his methodology and form of argument runs parallel to the meteorological explanation for crop circles. For further evidence he turns to an eye-witness account of encountering a newly burnt circle shortly after a thought story.

Plot's answers to the weaknesses of his theory are also remarkably similar

³³Chorost, writing in "Thesis" makes a similar point, noting that: "Plott's [sic] discussion anticipates parts of the modern debate with remarkable fidelity... It appears that Plott anticipated the meteorological theory by roughly 309 years."

to Meaden's. He rebuts the complaint that his theory needs lightning to strike vertically if circles are to be caused by it, noting that most circles are not, in fact, geometrically circular and thus indicate that the conical lightning struck at an angle (18). He has more problems with the tendency for rings to enlarge, and postulates that the lightning strike may infect the ground with some sort of disease that continues to spread outward in a circular manner. He draws on the observation that marks showing imperfect segments appear to grow inward in the middle and postulates that this is the expected effect of a lightning strike (18).

The success of Plot's explanation is hard to gauge but it does not appear to have been totally forgotten. In 1789, Erasmus Darwin (grandfather of Charles Darwin) appears to accept the explanation, writing in a couplet:

So from dark clouds the playful lightning springs, Rives the firm oak or prints the fairy rings.³⁴

In further notes Darwin elaborates on the point, noting how the explanation seemed to fit the observed evidence. Currently further information about

³¹ Reprinted in Chapman. The poem is entitled "Botanic Garden". Consider also the following, recently discovered quote:

The peasants point out, upon the plain, those electrical rings, which vulgar credulity supposes to be the traces of the Fairy revels.

The passage concerns the balled of "Tam Lin" in which a mortal is kidnapped by a fairy queen. Donobleu use it in his analysis of a formation known as "The Devil's Tramping Ground" in Chatham County, NC. The original comes from Lowry C. Wimberly, Folkhore in the English and Scottish Balled (NY): Fredrich Ungan, 1293), 64. It is notable that Donobleu traces the evolution of various beliefs about this formation, viewing them as successive reinterpretations and concludes by suping, "now that the legend has been popularized and new modern. motifs have appeared, it seems that the devil is in danger of belong replaced by spacemen from another planes." (8)

the popularity of Plot's theory is not forthcoming, but the similarities of his observations to those engendered by the crop circles phenomenon have caused quite a stir. Rickard uses Plot's notes to assert that crop circles did not exist as a phenomenon at that time ("Whirls" 68), whereas Randles and Fuller use it as proof to the contrary. Regardless, David Reynolds analyses one eye-witness account given by Plot as being a confused account of a sighting of a plasma vortex interpreted according to the peasants' world-view. Reconfusion spread to one reputable newspaper, The Daily Telegraph, which, on reviewing Crop Circles: A Mystery Solved, assumed that Plot had in fact predicted the Joution of the mystery of the crop circles some three hundred years ago. Years ago.

Although Plot's theory has now been proved to be without foundation,

³⁵Randles and Fuller, Mystery Solsed. Also Paul Fuller used Plot's diagram of square fairy circles to prove that complex formations have always existed (BUFORA lecture). This appears to be a genuine mistake by the authors and I do not believe that they still hold this position.

³⁹Reynolds gives various possible explanations for the account in Plot. Briefly, in 1590 n woman returning from griefling a millisone saw an universe of people dancing in a ring, in an unusual manner, in a cropfield. On looking closer the woman discovered that some of the dancers had closer hooks for feet. Frightened, the woman called on Jesus to protect her, at which point, all but one of the dancers disappeared, two people got picked up and carried away by a whirtfund and the woman hereiff was buttered by intense wind (359). Reynolds gives three possibilities, either the woman was in the vicinity of a plasma vortex and suffered from hallomations; that a crop circle already existed and that a group of people in the substitution of the control
³⁷The Daily Telegraph 16 Aug. 1990: 5. Bob Kingsley's struggle to correct this misapprehension is printed in his "Eye on the Press".

it does clearly show the traditional nature of many of the types of extant explanations concerned with the crop circle phenomenon. This observation is one that has not gone unnoticed amongst circles researchers:

It is curious how most of the theories put forward to explain crop circles have their counterparts in antiquity, as we have just noticed. (Rickard, "Whirls" 68).

However, I believe that this is not just an isolated case of coincidence and that many of these same types of explanations can be seen in more recent phenomena.

Circles and saucer nests

A more recent belief tradition concerns UFOs. Looking at UFO explanations would require a thesis in itself, and even trying to abstract such information is beyond the scope of this document. So However one subject can be touched on here, and that is the issue of "saucer nests", or more generally "Unidentified Ground Markings" (UGMs).

Generally, UGMs have been examined in the light of the extraterrestrial hypothesis and used as evidence for the existence of physical, alien spaceships.³⁰ Although UGMs can come in many types⁵⁰ the most commonly

³⁸The dissertations of Peter Rojcewicz and Thomas Bullard provide the best guide for folklorists to the subject.

folklorists to the subject.

3ºSee for example Chalker; Hynek The UFO Experience 126-157 and Hendry who rules
out studying any ground trace that is not associated with a UFO sighting (75-84).

¹⁰For example the NAICCR report divides UGMs into ten types, some of which are the modern-day crop circles.

known are "saucer nests", circular depressions in the ground or circular areas of flattened grass. The most relevant example comes in a report by Vallee and Hynek of a series of ground markings found in Saskatchewan in 1974. In this case, seven circles of flattened, swirled wheat were found after a strange encounter with a UFO. The report is notable for photographs of the circles that clearly show the similarity between these traces and crop circles. It also demonstrates the influence of the ETH on the investigative methodology, in which the emphasis is on eliciting details of the UFO with the UGMs being used as corroborative evidence.

The above case gives an idea of the use of the ETII to explain the origin of UGMs, and also its role in setting the criteria for what constitutes applicable evidence. However a series of UGMs from Tully, Australia in 1966 demonstrate what happens when the events are anomalous enough to pose a threat to the dominant explanation. The best description of these events is given in Jacques Vallee's Passport to Magonia and I draw on his work here. Briefly, a banana-grower named George Pedley was driving a tractor near a swamp when he suddenly heard a loud, hissing noise. Looking around he saw "a machine rising from the swamp", which, whilst rotating rapidly, suddenly took off at tremendous speed (33). On further investigation, five circles of cut and flattened reeds were found. Furthermore, it turned out that many of the people in the area had also seen the UFO and had reported their sightings independently of Pedley. Although Vallee deals with the subject from

an ETH perspective he also includes some of the explanations given for the "saucer nests."

- · Soviets testing secret military weapons. (33)
- Various types of birds such brolgas or blue herons "dancing" in the reeds and being startled into flight by Pedley. (34)
- Mating crocodiles thrashing around in the reeds and making the circles.
 (34)

Needless to say, Vallee rules all of these out, but again the same themes as appeared in the crop circle explanations, even down to mating animals making circles (whether crocodiles or hedgehogs), appear.

Perhaps the most ironic element of Vallee's analysis of these UGMs is in his discovery of the lightning theory of fairy circle origins. On discovering Darwin's poem Vallee writes:

It is amusing to note that attempts have been made, in the early days of Rationalism, to explain fairy rings as electrical phenomena, a consequence of atmospheric effects. . . The formulation of this idea in terms of modern plasma physics will no doubt soon be provided by eager scholars. (38–39)

The Bell Island lightning strike

A final example of the traditionality of explanations can be seen in the aftermath of a "super-lightning" strike that hit Bell Island, Newfoundland on April 2nd 1978.⁴¹ The lightning-bolt struck the home of James Bickford in Lance Cove, Bell Island, smashing the electricity meter, blowing electricity outlets out of the wall, destroying a hen-house, killing a number of hens and finally striking a tree in nearby woods before going to earth. ⁴²

The event caused a huge stir in the small community at Lance Cove as well as among scientists at Memorial University, and for the next week or so speculation was rife as to what had actually occurred:

While all and sundry speculated about the exact nature of the phenomenon — with guesses running from a meteorite shower to a falling satellite to a UFO — the big news in the Bickford household read that, miraculously, no one had been hurt. 13

Dr. Tom Gold travelled from Ithaca, NY to investigate the scene, postulating that the event may have been caused by a meteorite strike or one of a group of phenomena related to earthquakes.⁴⁴ The meteorite explanation was also favoured by a Dr. Ken Collerson of Memorial University who thought a lightning explanation was "not very credible", ⁴⁸ The U.S. military also become involved, sending two attachés from Los Alanos, CA to Lance Cove as, apparently, military observation satellites had picked up the blast on their monitors.⁴⁶

⁴¹ owe thanks to Phillip Hiscock for first pointing out the suitability of this topic and to David Kennedy for furnishing me with copies of newspaper reports.

⁴² Reported in The Daily News 3 Apr. 1978; The Evening Telegram 3 Apr. 1978.

⁴³ The Evening Telegram 4 Apr. 1978: 1.

⁴⁴ The Evening Telegram 6 Apr. 1978.

⁴⁵ The Evening Telegram 6 Apr. 1978.

⁴⁶ The Evening Telegram 10 Apr. 1978.

From the papers it can be seen that several explanations became current. notably the meteorite and lightning strikes, UFOs are mentioned but not stressed. Although I am unable to do further research presently, personal communication with an inhabitant of Bell Island, revealed that at the time there was a great deal of talk - ostensibly confirmed by the arrival of U.S. military attaches - about whether the strike was caused by a Soviet military satellite, or by some sort of attack from a UFO that "went wrong." Pending further research, it does seem likely that in this case we have some of the same types of explanation occurring as with the crop circle phenomenon: a supernatural one (UFOs), a natural one (lightning/meteorites), and a humantechnological one (Soviet military satellites). As with crop circles, when people are forced to try to come to terms with something out of the ordinary that can not be denied, it would seem that folk explanation, as a genre, rises to the surface and, at least in the first recourse, people turn to traditional explanations to come to at least a preliminary understanding of the events that have just entered their lives.

4.2.2 Explanation and innovation

If one can say that explanations can and do have a traditional basis then one must also allow for the flip-side of tradition — innovation. The question is, how do explanations change? This is not an issue that has been explicitly addressed before, although at least two authors have offered ideas

about changes in belief systems from a folkloristic viewpoint: David Hulford and Linda Milligan. Truthermore, the crop circle phenomenon provides an excellent case of a change in explanation with the challenge of cereological hypothesis to the ETH. This event is analysed as an example of Kuhnian paradigmatic change in the next chapter, but for now it is useful to give an overview of the manifestation of this change in recent years.

In earlier part of this chapter I gave a brief overview of saucer nest phenomena and noted how, in at least one case, it was possible for a series of events to pose a threat to the dominance of the ETH, for which saucer nests were usually used as evidence.⁴⁸ It is my contention that the crop circle phenomenon has taken a species of UGM and separated it from the ETH through a series of different strategies.

Firstly it should be noted that the ETH labels UGMs as "close encounters of the second kind", 40 that is encounters with UFOs in which they leave behind some physical evidence of their activities or have an effect of some sort on the percipient(s). Generally these marks are held to be the result of a UFO landing. In the early days of the crop circle phenomenon, and especially during the first bout of media interest in 1983, this appears to

[&]quot;Hufford, "Contemporary Folk Medicine" 46-65 provides an analysis of falk medicine as system of helic. Linda Milligan, "Tettah" provides an overview of the hattle between believers in the existence of Bijfoot in Olio, some of whom hold the view that it is an alian creature associated with UFOs and others who believe that it is an unknown wild animal. Hufford also deals with this issue from a different perspective in "Humanviels". "See no.273-280 above.

⁴⁹The terminology was invented by Hynek and forms one part of a continuum of UFO encounters from lights seen in the sky to abduction by aliens.

have been exactly the cereological position. The earliest cereological writing was published in outlets such as Flying Saucer Review and was concerned with finding UFO links to crop circles. In fact, as noted before, this is what fir.t inspired Randles and Fuller to investigate crop circles in an attempt to discrete them from UFOs. Si

The early crop circles did appear to support the ETH for only a few, simple circles were found (singles, triplets and in 1983 quintuplets) all of which could fit the classic shape of flying saucers, and the shapes were appearing in an area of the world that had been known as the UFO capital of Britain. The big problem was the paucity of UFO sightings associated with the formation of crop circles, something which, allied to their seeming geographical isolation, conspired to leave the UFO community outside of the West of England largely ignorant of, and uninterested in, the phenomenon. Consequently, the perceived evolution of the phenomenon and its anomalous features seem to have caused a massive crisis for the ETH explanation, and those who would normally be foremost in trying to save it, namely the American Ufologists, remained largely ignorant of the full extent of the phenomenon.

The developments in the circles phenomenon have forced cereologists to conclude that the placement and form of the crop circles is not accidental and does in fact represent an attempt, by something, at communication.

⁵⁰ See for example, Pat Delgado's FSR publications.

⁵¹They can be seen as following the advice in Hendry's influential UFO Handbook which states that any ground marking not explicitly linked to a UFO sighting should not be regarded as a part of ufology (75-84).

This is directly at odds with the ETH, which views UGMs as the accidental byproducts of UFO activity. Consequently there has been a massive, radical reformulation of what a UFO is amongst circles researchers. For example both Pat Delgado and George Wingfield talk dismissively of "flying saucers" and "little green men": Delgado appears to believe that UFOs manipulate force-fields to form crop circles, while Wingfield postulates that UFOs appear to "seed" crop circles at new sites which are then capable of generating circles without UFO activity. Whatever the precise position, it is a fact that current cereological thought takes the basic premise that circles are communication. Even Ken Rogers, president of The Unexplained Society and doyen of the ETH, now believes that crop circles are deliberately caused by UFOs to communicate a message. ¹⁵

Cereologists are generally quick to point out that their stand is not an argument against the ETH and point out that no one really believes in flying saucers anymere. The plain fact of the matter is that this is not true. The main movement of American Ufology is based around the search for evidence for crashed alien spaceships, or searching for evidence of the activities of the

⁵²Wingfield's comments are from personal communication. Delgado's are deduced from his books and comments in newspapers.

³²The extent of the communication metaphor waries. Some, such as Michael Chrorat believe that there is an interent, linguistic message encoded within the circles whereas others, such as perhaps Bob Kingley, lean towards seeing the circles as almost extra-linguistic, which is to say that the choice of action is significant but the form useff is probably not — analogous perhaps to a person's choice of clothes on a given occasion. For example, Kingley anotes that UPO phenomena tend to vary is different countries and postulates that this maybe a deliberate act by some intelligence to conform its message to different societies' preconceptions (Personal communication).

aliens, hence the current interest in abductions and cattle mutilations. A The perceived benign nature of the crop circles phenomenon is at odds with the current formulation of the ETH, and the cereological explanation has to be seen to be as much of a radical break with the ETH as Einstein's theory of general relativity is with Newton's laws.

Perhaps the most obvious sign that there has been such a change is in the type of evidence gathered from crop circles as opposed to saucer nests. Michael Chorost best exemplifies this when he tries to list the various data that should to be collected by cereologists:

There should be routine data collection with IR cameras, geiger counters, magnetometers, plant DNA assays, weather stations and so on. Good photos and accurate measurements need to be taken; even dowsing results and unusual physical sensations should be assiduously recorded.

As such there is not that much difference between this aspect of his call and the usual method of investigating ground traces under the ETH hypothesis, but Chorost implicitly goes further by typing circle formations according to

²⁴This is a statement that would anger many American ufologists who regard the ETH as an aberation. Yet reading such works I am consistently struck by the way in which such researchers define their work in relation to the ETH also Hander's summary of UFO explanations has the ETH as by far the largest category and explanations involving physically real spaceables account for over half of the data. It seems to me that even if the ETH can no longer be considered the orthodoxy of American ufologists that it is still very much the nack leader.

⁵⁵This is something of a generalization. Although there are ufologists who see the postulated aliens as benign, there seem to be far more who regard the cliens as at best neutral in their intents and the current interest in the MJ-12 docurrent, cattle mutilations and abductions takes the premise of alien exploitation of us as its basis.

their form and arguing for analyses of the spatial relationships of the formations; both activities would be meaningless if the circles were no more than the accidental byproducts of UFO activities. Furthermore, this appears to be the main thrust of his research, and he gives the data collection necessities above only because he can not rule it out as irrelevant at the present state of research. Indeed the major part of his paper is a theoretical overview of the issues arising from the analysis of crop circles as some sort of linguistic code.

Chorost's article gives the most explicit example of how cereological research marks a radical reformulation of the ETH. Other cereologists are ralling for much the same thing, hence Michell's plea for cereologists to discard all currently held explanations and start all over again. So Similarly, Wingfield attempts to assert that cereology now subsumes ufology, in as much as that the latter forms a part of the crop circles phenomenon ("Beyond"), rather than crop circles being seen as a sub-set of the evidence for the UFO phenomenon. However, cereology exites the vast majority of UGMs that the ETH tries to explain, such as blasted holes, circular depressions, and rings of burnt grass. As Ralph Noyes says, "A 'UFO nest' is one thing and a crop circle is quite another," (Introduction 27). Furthermore, the importance of the evolution of the phenomenon and its early geographical isolation in Wessex leads many to cast doubt on the possibility of existence of crop circles in

⁵⁶Otd, earlier, "What Mean?" 59,

countries other than Britain before the last few years, a stance that North American researchers such as Chris Rutowski and Michael Chorost appear to find untenable ⁵⁷

It can be seen that cereologists have temporal, spatial, and structural criteria to determine whether a particular UGM is a crop circle that are vastly different from the ETH. Furthermore the ETH position is increasingly derided by cereologists in terms of the stereotypes of alien spaceships and little green men:

The diminishing band of those who believe we are being visited by extraterrestrial life-forms claim these disturbances [UCMs] as "UFO nests" or "UFO landing traces', and they use the acronym UFO (Unidentified Flying Object) as though it were a noun with the meaning 'extraterrestrial space craft'. Most ufologists, anyway in recent years, have simply suspended their judgement about the cause of these many peculiar markings, and many of them would welcome the kind of meteorological explanation for which Meaden has been seeking. (Noves, Introduction 27)

The paragraphs above should indicate the way in which the cereological explanation is usurping the ETH. It is not a simple addition to the ETH for, if nothing else, it rules out the vast majority of evidence that the ETH uses. It is a radical change brought on by the advent of the mystery of crop circles. Linda Milligan reports a similar attempt at explanatory change in the Bigfoot sightings in Ohio. She finds that the traditional explanation of Bigfoot as some sort of wild, possibly semi-intelligent, animal has come under

⁵⁷Personal communication. See also Chorost's comments on "naive" hypotheses in "Thesis".

threat from a group who believe that Bigfoot is an alien of some sort. The interaction between these two explanations has engendered a large amount of discourse. In this case the ETH is making a bid to usurp the traditional explanation, for those that hold the view that Bigfoot is an alien creature draw on memorates that feature a correlation between sightings of UFOs and large, hairy bipeds.

Linda Milligan writes from a legend perspective but her findings are extremely pertinent here. She notes that the Ohio Bigfoot researchers community have accepted this new explanation to various degrees, and she writes that currently the "older, more established form of the Bigfoot legend coexists with an emergent belief," (97). The reason she gives for this is that she believes the ETH is imported from researchers in Pennsylvania, a neighbouring state, and, as yet, there is no compelling evidence for this new explanation. For example Milligan found no combined UFO/Bigfoot memorates amongst the Ohio researchers. So she writes:

It is too soon to tell whether or not the emergent helief will become an established legend. The lack of supporting memorates in Central Ohio suggests a resistance to change. The change from Bigfoot the animal to Bigfoot the alien could not simply be described as dynamic. Such a change would be radical and would invalidate much of what has become traditionally associated with the creature. Such a radical alteration of traditional belief would require compelling new first-and second-hand accounts as sup-

⁵⁸It should be pointed out that here Milligan is writing within a tradition of disbelief, assuming that memorates are generated by legend rather than vice-versa. However that does not invitidate the point she is making.

porting evidence. (97-98. Italics my own.)

Linda Milligan's discovery that the change in explanation would be "radical" and would "invalidate" the previous belief corresponds exactly with the situation in circles research. In the case of the crop circles the traditional explanation for them is that they are landing marks of alien spaceships (the ETH) and it is this that is being usurped by the cereological hypothesis that the circles are the results of communication. Unlike the situation in Ohio, compelling evidence in the form of crop circles and their associated phenomena has come to light, and it this that has allowed the change.

Finally it should be noted that the characteristic of rapid, radical change in explanations is predicted by Hufford in his analysis of folk processes, if we allow for the folkloric nature of such explanations. Writing in "Contemporary Folk Medicine" Hufford asserts that:

Polk processes are those that have the same characteristics of low energy systems: initimate feedback loops and, therefore, rapid accommodation to local conditions. From these characteristics the most salient features of folklore flow: regional variation, identification with groups (e.g. ethnic groups), and resistance to change when conditions are relatively stable but rapid innovation when conditions change. (4)

Furthermore, Hulford's analysis provides an understanding of the variation in the uptake of the cereological explanation amongst different levels of society. The circles-research community provides a close-knut group in which there exists an intimate feedback loop, thus for them information is rapid and easily available and they are, Terence Meaden as much as Pat Delgado, part of what can be identified as a low-energy system. However the great mass of the public have no such intimate feedback loop, having to rely on the mass media for information and are consequently much more resistant to change as well as less prone to rapid innovation. In Moverer, perhaps one can predict that, if the circles phenomenon continues to be of such great media interest then the cereological hypothesis should continue to replace the ETH. It may well yet come to pass that the mysterious crop circles, which first lead the Daily Express to ask "ET" to phone them, will eventually be the death of the ETH.

⁵⁹Here in Newfoundland, where I found the ETH to be totally dominant, people are an extra step removed from information about the subject, indicating perhaps that the ETH has not yet been put under the sort of pressure that it has with the continuous crop circle coverage in the UK.

Chapter 5

Explanation and Belief

Introduction

The basis of this final chapter is the analysis of the data presented so far. The focus of my attempt is Thomas Kuhn's theory of paradigmatic revolution in scientific explanations. The main body of the chapter is devoted to ascertaining its applicability both to circles research and to beliefs held about crop circles amongst those less involved with the phenomenon. The former has previously been assayed by Michael Chorost ("Thesis") and, working separately, we have both arrived at broadly similar conclusions. The latter is the more problematic, and I turn to the work on belief systems undertaken by

[†]I received Chorost's paper before writing this chapter and it is referenced throughout this thesis, but I go much further in the analysis than he wishes to. Consequently, whilst acknowledging the precedence of his findings, most of the material in this chapter goes beyond the issues he raised.

Borhek and Curtis to help ascertain some of the features of folk paradigms. In the course of the chapter I also return to the concept of explanation as a genre, providing some preliminary ideas about how it might be characterised and in what contexts explanations may be voiced. The focus of the chapter, however, is on the application of paradigm theory to crop circle explanations, and it ends with some ruminations about the general utility of the theory.

5.1 Explanation and Paradigm

Thomas Kuhn's The Structure of Scientific Revolutions introduced the concept of "paradigms" into the study of helief systems: the system he studied being that of science. More recent works, such as Borhek and Curtis's The Sociology of Belief, have attempted to discuss belief systems qua systems and have explicitly included science as a belief system. Further research has noted the applicability of Kuhnian paradigms to a wider class of phenomena, and some of the basic concepts have been used in folkloristics but, to date, there appears to have been no major attempt to ascertain the viability of applying the ramifications of Kuhn's findings to belief studies. For example, in describing the dual standards applied by folklorists in their approach to belief materials vis-à-vis other folklore genres, such as foodways, Ilufford notes that

²See for example, Barnes, "Paradigms: Social and Scientific."
"Bumanoids"; implicitly in Milligan, "Truth", and in Rojcewicz's "The Folklore of the "Men In Black".

the resulting inadequacies of analysis are "derived from our assumptive set", or "paradigms" ("Humanoids" 234-235). His remarks are perspicacious and played no small part in motivating the following analysis.

5.1.1 The nature of paradigms

Kuhn developed the concept of "paradigms" to describe the nature of scientific research. He was motivated by the observation that the dominant description of scientific research was as an accumulation of knowledge, in which each new theory was supposed to build upon the successes of the one it superseded. To Kuhn it seemed that, instead, science seemed to exist in two states, a 'normal' state in which the emphasis lies on puzzle solving and a 'crisis' state in which it seemed that the scientific community was engaged in a furious debate about the proper way forward. The latter undertaking appeared to be more like revolution than accumulation. Consequently Kuhn looked for a method of describing with one underlying principle the nature of these two states and proposed the notion of paradigm — a "body of intertwined theoretical and methodological belief that permits selection, evaluation and criticism," (17).

A paradigm is a way of thinking, an assumptive set as Hufford describes it above. The essence of paradigm is to unify disparate thought, to describe the nature of a certain scientific pursuit: not only does it inform the scientist about the right questions to ask but about the sort of answers to expect from those questions. Kuhn uses the metaphor of a jigsaw puzzle, arguing that a scientist conducting research under the auspices of a paradigm is assured that all the pieces are probably there and that the final result will be some sort of meaningful picture. This conduct of scientific research is what Kuhn describes as "normal science" and is characterised by its 'problem solving' nature, by the way in which its proponents delve into steadily narrower and more arcane problems within the selected paradigm.

Hufford also refers to the "tyranny" of paradigms, for they "make certain lines of inquiry very difficult to think of in the first place, let alone to objectively consider," (235). To return to Kuhn's jigsaw metaphor and extend it somewhat, the paradigm tells you what side of the jigsaw piece to look at, what you can and can not do with it (no sawing off the connectors to make a piece fit) and what to expect in a jigsaw piece: for example, if you are assembling a jigsaw that the paradigm says should eventually look like Van Gogh's "Sunflowers", then you should probably ignore a piece that appears to have a coca-cola label on it. This may seem a somewhat whimsical priceis, but the effect of paradigmatic blindness can be seen in J. Allen Hynek's description of his attempts to interest the scientific community, of which he was a part, in UFOs.

During an evening reception of several hundred astronomers at Victoria, British Columbia, in the summer of 1968, word spread that just outside the hall strangely maneuvering lights — UFOs — had been spotted. The news was met by casual banter and the riggling sound that often accompanies an embarrassing situation. Not one astronomer ventured outside into the summer night to see for himself. (UFO Experience 7.)

Consequently, one can say that the acceptance of a paradigm inevitably blinkers those who are working within it. Kuhn argues that it is this which allows science to make such leaps because it focuses the concentration of the scientific community. The reverse of this can be seen in folkloristics where the dominance of the Cultural Source Hypothesis as a paradigm has virtually strangled folk belief scholarship.

A paradigm informs normal science research, but there are also times when that research hits a crisis, when researchers begin to realise that there is just too much wrong with the current paradigm (77-90). Kuhn demonstrates that such crises are dependent upon anomalies — things which can not be explained satisfactorily (if at all) under the current paradigm — and are provoked by the perception that the inability to deal with the anomaly is a failing of the paradigm and not of the researchers. In crisis science, the nature of the research is totally different, featuring several groups of researchers promoting different explanations for the same observations (86). During a crisis period, several paradigms compete for dominance and it is this competition that motivates a discourse, rather than the usual monologue of normal science. It is almost as if all the various jigsaw builders have fragmented into groups, and all are zealously trying to construct a new solution out of the various pieces available to them: if it means turning over some pieces, cut-

ting off the connectors of others, and scouring the corners of the laboratory for all those ones with coca-cola labels that were thrown away earlier, then so be it. In science, Kuhn writes "All crises begin with the blurring of a paradigm.... And all crises close with the emergence of a new candidate," (84). This chapter examines what happens in a crisis outside of science.

5.1.2 Paradigms and crop circle research

Given the previous paragraphs, it should seem reasonable to attempt to describe circles research as a discipline in search of a paradigm. This is a stance taken by Michael Chorost, who says that currently circles research "consists of a mass of disparate observations and a few theories, none of which explain very much," ("Thesis"). He continues to describe a particular eye-witness account which is interpreted as UFO sighting by Delgado and Andrews and as an atmospheric vortex by Terence Meaden. The point can be made more strongly, for crop circles appear to be a classic case of the anomaly that can provoke a crisis. Kuhn observes that most scientists are able to live with anomalies providing they believe that the anomalies may be explained one day, but the crop circles phenomenon, with its massive proliferation and perceived spatio-structural evolution, has provoked a crisis in at least two disciplines: ufology and meteorology. It is in the light of this observation that I wish now to interpret the discourse between the three

major explanations.4

Crop circle explanations as paradigms

It is useful to look at the three main crop circle explanations and see if it is possible to regard them as competing paradigms. If this is the case, then one should find several correlations between the explanations and Kuhn's paradigms, particularly the observations that paradigms determine the nature of the facts that they explain, and that paradigms are prior to rules—which is to say that one can identify the existence of a paradigmatic explanation without necessarily being able to interpret it (44). For now it should be noted that I am referring to the expositions of the various explanations that are held by circles researchers; dealing with the more general folk paradigms is more difficult and is attempted later.

The cereological paradigm

Previous chapters have delimited the ideology of the cereological explanation, and if this is to be interpreted as a paradigm then one would expect there to be a relationship between fact and theory, between evidence and

[&]quot;Chorest warrs against adhering too closely to the Kuhnian model, for he believes that it will distort much of what is really going on. The following analysis is presented as a thought experiment, a test to see what happens when one does apply the theory of paradigms to systems of folk belief. Also, Chorest observed that "I see a lot of old ways of thinking coming to the surface," and claims that this is incompatible with Kuhnian progress through revolution (Personal communication in both cases). For now I take cognizance of his observations but believer, nonetheless, that the analysis worth pursuing.

explanation, that asserts a co-evolution. That is to say that the evidence and the explanation for the evidence tends to emerge together, with neither being prior to the other. This mutual dependence can be seen in a column in The Cerealogist 3 in which various senior cereologists are asked to make predictions for the future of the circles phenomenon. For example, Lucy Pringle writes:

I predict that the crop circles will continue to appear mainly in Wessex but extending countrywide. Reports of formations will come in from far-flung corners of the world but the British Isles will remain the focal point. (5)

These predictions in The Cerealogist represent an attempt by the writers to utilise the cereological paradigm. Consequently, all of the predictions focus on the evolution of the phenomenon and the increasing role played by various anomalous areal and visual features:

I believe 1991 will undoubtedly see more major developments, larger markings, much more complex structures perhaps as intricate as snowflakes; and do not forget the aerial association which I have always believed was a true one. Lastly, THE NOISE. When you have experienced this, as I have on several occasions, YOU DO NOT NEED TO BE TOLD HOW IMPORTANT A PART ITS PLAYING. (Colin Andrews, 5. Capitals in original).

The cereological paradigm also conforms to Kuhn's observation that candidates for paradigm generally only attempt to explain a sub-set of the available data, and this can be seen in the following quote from Ralph Noyes, in which he weestles with a definition of the field. It is these basic characteristics — disturbance in a field of crops; mainly a swirled flattening without other damage; and great precision in the the occurrence — which most crop circle researchers have since used as the definition of their field of enquiry. ("Crop Circles" 2.)

In this case it can be seen that Noyes is ruling out the vast majority of Unidentified Ground Markings (UGMs) in an attempt to restrict the subject of the discipline.

One can assert that the cereological paradigm is oriented around several loci:

Evolution — temporal, spatial and structural. This delimits the available evidence. For example, after the pictograms of 1990 simple circles are less important; they do not cease to be evidence for the explanation, but their evolution into pictograms is now a primary concern.

Circle features — Ralph Noyes' quote above indicates the manner in which overriding characteristics are adduced from the features. Most notable is the paradox of the gentle but strong force and the concept of complexity. From this much seems to flow.

Intelligence — in terms of the placement of the circles and their seeming symbolism. Also in terms of the way in which circles manifest, the Puckish tendency noted earlier, and the way in which the phenomenon appears to react to the investigators. Mysterious phenomena — most notably the noise, strongly stressed by

Colin Andrews above but also the focus of Wingfield's narrative. Also

the various equipment failures, time slips, dowsing results and animal
reactions.

This is not a characterization or text book of cereological thought, but it does indicate the phenomena that comprise the set of facts to be explained. It is an attempt at identifying a paradigm without interpreting it.⁶ While it should be clear that these facts are a part and parcel of the explanation, other items of evidence, such as the topographical relief of the immediate surroundings of a circle formation, are considered irrelevant whilst eye-witness accounts are branded as misleading and unhelpful.

The meteorological paradigm

As with the cereological paradigm, the meteorological one is comprised of a symbiotic relationship between fact and theory. For example, Meaden has been repeatedly accused of consistently rewriting his theory and his answer is that he has always maintained a standard view, that crop circles are caused by a type of natural, atmospheric phenomenon, only the details have changed. Essentially, he is working within a paradigm that is accurately described by

See page 157 in this thesis.

⁶See Kuhn (44-50) for his analysis of the possibility for so doing, and also his ideas about how it is possible for scientists to be able to work within a paradigm without being fully able to interpret it themselves.

George Wingfield when he says:

Terence Meaden is the only one who thinks that these are natural phenomenon, phenomena and

that is because he starts off from the premise they have to be natural phenomena and works from there, and if you're determined there are natural phenomena you have to find some kind of a uh an explanation to

to account for what's going on. (Tape-recorded interview, Sept. 1990, side 1 rev. 27-33.)

As with the cereological paradigm, it is possible to identify the various loci of the meteorological paradigm by looking at the evidence that is stressed by its proponents.

Eye-witness accounts — especially those appearing to correlate an atmospheric phenomenon with a crop circle.

UGMs — unlike the cereological analysis, crop circles are presumed to be just one instance of the damaging effect of a vortex on the ground. Thus the meteorological paradigm takes as evidence all sorts of UGMs that could be caused by the impact of some type of electrically charged vortex with concomitant magnetic fields.

Topological relief — interpreting crop circle locations as a function of the relation between the boundary layer and the topological relief. Consequently there is interest in publishing statistical analyses of the proximity of crop circle locations to nearby hills or escargments.

Meteorology — recording climactic details, especially micro-meteorological events such as the passage of weak cold-fronts.

UFO evidence — most controversially the meteorological theory radically reinterprets UFO evidence such as car-stops, landing traces, and abductions.

This list provides the loci of research within the meteorological paradigm. Events such as equipment failure, obscure marks on photographic negatives, and strange trilling sounds are thought to be either irrelevant or simply explained as the after-effects of the vortex strike. Further phenomena, such as the dowsing results, are used as tools but are not thought of as evidence. Issues such as intelligent location, reaction of the phenomenon to researchers, the symbolic nature of formations, are not merely irrelevant but are nonexistent within the meteorological paradigm.

It can be seen that the two explanations use very different evidence in their explanations, yet taken as rationally constructed systems both are internally coherent and promise to explain, if not now, then later, the 'facts'. Contrast this to the hoax theory which is not an explanation that has grown out of circles research but is the explanation for crop circles within the extant and well established "skeptical" paradigm. Whereas the cereological and meteorological explanations can be seen as reformulations of existing paradigms, the hoax explanation is, according to its proponents, in no such state of criss.

The skeptical paradigm

This paradigm has yet a different set of facts compared to the other two.

Most notably, it does not characterize crop circles as anomalies but as fundamentally explained. Consequently, it is unsurprising that there has been so little effort devoted to explaining crop circles as hoaxes, as it has, essentially, already been done.

Existence of hoax circles — they are known to exist and, according to Fisher, circles researchers have no way of determining 'genuine' from 'hoax' circles.

Existence of previous hoax cycles — UFOs hoaxes and faked "Bigfoot" prints indicate that hoaxers do exist and have fooled people in the past.

Existence of symbolic systems — such as Satanic graffiti which indicates that it is possible for seemingly coherent groups of symbols to emerge from unconnected hoaxers.

Human gullibility — past frauds indicate, by Occams's razor, that present and future frauds will continue.

Unlike the paradigmatic loci of the cereologists and meteorologists, this list shows the basic premises of the explanation. Although this evidence is still to be explained, it is to be done in terms of disciplines such social-psychology, sociology or even folklore. For the hoax explanation, crop circles are a non-mystery, hence perhaps the almost total lack of articles in The Skeptical Inquirer, the flagship journal of the skeptical movement. That is to say that skeptics have not been forced to reconsider their position by the advent of the crop circles phenomenon, it is merely a new subject to be explained as the result of human superstition and gullibility. Perhaps this also explains what appears to be the increasing success of their theory amongst the world outside of the circles researchers.

5.1.3 Circular revolutions

So far it has seemed as though it might be possible to conceptualise the various crop circle explanations as paradigms vying for dominance within circles research, certainly that is Chorost's thesis, but there are problems. For a start, circles research is not a subject area in its own right, in the way a scientific discipline such as biochemistry is. Of course it may become

⁷One could argue that the supposed evolution is a prime case of historic-geographic styling of the symbols, carried through mass-media channels. The comparison with Satanic graffiti was suggested by Philip Hissock in conversation.

⁸The one article to appear so far is Wendy Grossman's, in which she is forced to argue that crop circles do indeed represent a genuine mystery.

An analogy could be drawn with a geneticist isolating a gene, or a Western scientist discovering the scientific basis behind a folk cure. Although the precise nature of the discovery could not be determined before the event, the researcher's paradigm informed her about roughly what to expect. For skeptic, crop circles seem to follow naturally from UFO hoaxes and were, therefore, potentially predictable under the skeptical paradigm. This contrasts totally with the creeological and, to a lesser extent, the meterorological theories which are the result of abandoning certain beliefs in an attempt to come up with a better explanation.

so, but at the moment that would only become possible if the cereological explanation won, for it is the only one that treats crop circles as a unified and distinct field. This analysis of circles research as an "immature" science, one that has not yet achieved a paradigm, is the stance taken by Michael Chorost and it should be noted that he does reject the meteorological explanation, otherwise his attempts to decode the pictograms would be meaningless. If this is to be the case, then circles research will be based on a premise totally at odds with orthodox science and will probably be consigned to live the same phantom half-life that ufology has suffered during its forty years of dominance by the extra-terrestrial hypothesis (ETH).

There is, however, an alternative way of looking at the situation, which is to see the crop circles as provoking crises within established disciplines, rather than as being the birth pangs of a new subject. The latter possibility appears, to me, to be premised on the presuppositions of the cereological position, as indicated above. Here I propose to examine the ways in which crop circles have provoked a "minor" crisis within atmospheric physics and a "major" crisis within the ETH, for I believe it is the case that Kuhn's analysis of the structure of scientific revolutions accurately describes much of the events in the last few years.

The death of "E.T."

At this point it is finally possible to phrase the events discussed in section 4.2.2 in terms of paradigmatic revolution. If one takes the position that ufology is a discipline that has been ruled by a particular paradigm, the ETII, then certain observations occur. Consider Kuhn's analysis of the structure of scientific revolution.

Crisis. According to Kuhn, a discipline needs to be in a state of crisis in order for an anomaly to provoke a paradigm shift (67-69). It should be noted that the ETH has gained most prominence in North America and has never been as successful in the rest of the world: part of the reason why American ufologists have generally produced the most detailed and in-depth studies. The illumination of this paradigm first appears to have begun in "Condon" report (Gillmor) which appears to use the ETH as a tool against ufology. Outside of America, iconoclastic researchers ploughed their own furrows: Jacques Vallee investigated the continuity of UFO encounters with older belief traditions; Aime Michell produced startling statistical analyses that seemed to imply that UFOs travelled in straight lines, a finding echoed by British ufologists, such as Jenny Randles and Peter Warrington who con-

¹⁰Eberhardt's bibliographies provide the best overview of UFO literature. An older annotated bibliography by Lynn Catoe is also useful.

¹¹The emphasis of this report, the most high-powered scientific investigation of UFOs ever, was that there was absolutely no basis to to assert that UFOs represented some sort of alien spacecraft. In so doing it is possible that they threw the baby out with the bathwater.

centrated on UFOs as psychic phenomena; whilst others such as David Clarke conducted work on the "spooklights" hypothesis; and Paul Devereux outlined his, possibly, cognate terrestrial theory, that found support in Canada from Michael Persinger's experiments. ¹² All of this can be seen as an attack upon the fundamental premises of the ETH, so much so that BUFORA's prestige publication *UFOs* 1947-1987 was able to take a step back and look at various possible hypotheses about UFOs. ¹³ Furthermore, the very heartland of ufology has been riven by Whitley Strieber's sensational best-seller *Communion* which details his alleged abduction onto a UFO. This best-selling personal experience narrative falls most nearly into the work done by the likes of Jacques Vallee and poses tremendous problems for the ETH. ¹⁴ Indeed the official position on the status of abductions under the ETH, best represented by Budd Hopkins, the ufologist who first unearthed Strieber's memories, is currently in competition with the abductee movement and newsletter started up by Whitley Strieber. ¹⁸

The paragraph above illustrates the various viewpoints that have been in-

nomenon.

Form." In Skeptical Inquirer 14.2 (1990): 122-123.

¹²There is no definitive reference for Michael Persinger's work as it has been published piecemeal in the journal Perceptual and Motor Skilis: an article appears in every issue since 1981. Persinger and Lafreniere provides a useful overview of the theory.
¹³Evans and Spencer, UFOs 1947-1987 later considerably revised and reprinted as Phe-

¹⁴See for example Ed Conroy's analysis of fairy motifs in Strieber's accounts in Report on Communion. Another detailed analysis of the relations between the fairy faith and UFOs comes in Rojcewicz's "Between One Eye Blink and the Next".
¹⁵See Phillip J. Klass's article "Communion and Intruders: UFO Abduction Groups

creasingly expressed as explanations for UFOs. ¹⁶ It can be seen that ufology has become a veritable Tower of Babel with the once dominant explanation — that UFOs are alien spaceships, the ETH — struggling to maintain its hold. This appears to fit the pattern of a discipline in crisis. In this perceived state of crisis the crop circle phenomenon could well be the anomaly that provokes a paradigmatic shift.

Response to crisis. The key to Kuhn's analysis of paradigmatic revolution is his assertion that:

The decision to reject one paradigm is always simultaneously the decision to accept another, and the judgement leading to that decision involves the the comparison of both paradigms with nature and with each other. (77. Kuhn's italics.)

Because of the crop circles anomaly, the ETH is under threat from two sources, the cereologists who would appear to like to subsume it within their field and the meteorologists who believe that they have a new paradigm for ufology. There are of course many other explanations that have been offered for crop circles which have no implications for the ETH, such as Cory's rotating sprinklers, but regardless of their utility none of these provide the dual facets of a new paradigm — which is to say that although they may explain some portion of the current phenomenon they do not seem to indicate new

¹⁶For a more comprehensive listing of the various UFO explanations see Richard Haines's "Review". Of particular note amongst UFO researchers is John Keel and his works and the increasingly popular "Cyberbloogical" school (Ring; Stillings). I am indebted to my external reader for this information.

areas in which further solutions may be found. For whatever reason, the ETH has become crucially bound-up with the crop circle phenomenon and the explanations for the phenomenon are threatening to either invalidate the ETH (the meteorological explanation) or radically reformulate it (cereological explanation). The only way the ETH would remain untouched would be if some cause for the crop circles that had absolutely no bearing on ufology, (fungus effects for example), were discovered, or if the hoax explanation were to be proved, in which case ufologists could return to the ETH and claim that crop circles never really had anything to do with UFOs anyway.

Paradigm conversion. Kuhn also discusses the almost irrational nature by which scientists change paradigms, calling it a "life conversion" (150) and an "act of faith" (157). These observations can be seen in the effect of Meaden's theory on Jenny Randles and Paul Fuller. Formerly having to work in ufology despite feeling uncomfortable with the ETH it seems that they both have been converted, and the evangelic fire in Jenny Randles' words as she preached to the largely unconverted audience at the BUFORA lecture on circles research (note the three-fold repetition at the climax of the passage) denotes the uncompromising stance of the researcher who has found a home.

I think that we have with this phenomenon suddenly found a wonderful key which unlocks a lot, of the puzzling secrets of the so far unexplained UFO reports. That's why we are encouraging you to go back, look at the UFO evidence in the light of this idea of an ionized vortex see how it might fit and like us I think you'll find I hope you'll find we believe you'll find that it does suddenly magically transform the evidence.¹⁷

Paul Fuller said much the same to me during an interview after the lecture, noting again the way in which Meaden's theory so forcibly struck him as being the answer to so many of his questions.¹⁸ It is notable that both used the same image of a sudden conversion, and of the way in which the theory magically transforms the evidence. Both seem to be indubitable parts of what Kuhn describes as the Gestalt nature of paradigm shift (passim).

The children of the crisis. Kuhn also notes that many paradigmatic revolutions appear to have been inspired by either young researchers or those new to the discipline, and this seems to be the case in cereology. For example, leading cereologists, such as Colin Andrews, George Wingfield, and Busty Taylor, are all new to any kind of paranormal research. Other researchers, such as Richard Andrews and Patrick Harpur, come from backgrounds with little interest in the ETH, whereas others, such as John Michell, Pat Delgado, and Archie Roy, have long been interested in UFOs but only from the sidelines, preferring to concentrate on other subjects. Very few hardened

¹⁷ Jenny Randles, BUFORA lecture September 1990: tape 1 side 2, rev. 484-490.

¹⁸Although this interview was tape-recorded most of the tape was lost due to a malfunction, hence the paraphrasing of his words here.

ufologists appear to swell the ranks of the cereologists.

The crisis discourse. Kuhn further asserts that the proponents of different paradigms are incapable of seeing eye-to-eye, describing the ensuing discourse as an argument between incompatible modes of community and stating that "Each group uses its own paradigm to argue in that paradigm's defence," (93). For example, the meteorologists argue that other vortices can be electrified so why not the one that causes crop circles? The cereological response is that such an argument is a non-sequitor. Equally, the cereological assertion of a symbolic nature to the shapes is totally disregarded by the meteorologists. It is not so much a dialogue of the deaf but one in which the proponents are speaking in different languages. 19

Crisis resolution. Kuhn's analysis is predicated on the assumption that any state of crisis will end with the emergence of one candidate for paradigm and that the response to this is a steady resumption of normal science as it makes an attempt to articulate the new reality. As yet, such a development can not be said to have occurred and perhaps may never do so, for Kuhn writes of science and equates crisis resolution with progress. Applying this rubric to events outside of the scientific community, assuming perhaps that successive reinterpretations of lights in the sky represents 'progress', is countries.

¹⁹Such an observation is strong support for Chorost's thesis that the debate is engendered by the non-paradigmatic nature of circles research. I make an attempt at resolving, or at least reducing, the differences in our views later.

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terintuitive and possibly irrelevant. It is, however, possible to take a reverseview and question the nature of 'progress' in science. Kuhn explicitly compares his model to that of Darwin's theory of the evolution of species, noting that, as with Darwin's theory, his is not goal-directed, that is to say that each successive revolution does not bring the subject closer to some ultimate aim, only further away from an origin. Whether this represents progress is debatable, what can be seen as the latest paradigmatic revolution in mathematics, "Chaos Theory", asserts that we are a lot further away from understanding the universe than most scientists' worst nightmares. 30

Meaden and the meteorologists

At this point it is germane to consider the effect Meaden's explanation of a plasma vortex, a previously undiscovered natural atmospheric vortex, has had on the meteorological community. Currently there appears to be little explicit support for Meaden's theory, and Reynolds has noted that those who disagree with the theory tend to do so because of a mis-understanding of the theory (letter). Part of this may be put down to the characteristic refusal of an established science to easily give way, part may be due to the fact that meteorology is not currently in a state of crisis, although the afore-

³⁰For an excellent overview of the rise of chaos theory see James Gleick's Chaos. Gleick explicitly uses Khuhian paradigms in his analysis. Compare Sagan's assertion, written before the rise of chaos theory, that "This book is written just before... the answers to many of those vering and auceone equations of origins and fates are to be pried lower from the commo?" (Breat's Pariss xiii) with the tenets of chaos theory that presuppose a findamental unknowability as absacteristic of even simple systems.

mentioned chaos theory has huge ramifications for the discipline, and part of it may be that the evidence Meaden claims to be explaining has long been exiled from scientific orthodoxy. It would appear that Terence Meaden may become caught in the same trap as the likes of Paul Devereux or Michael Persinger, who find themselves disliked by both mystics and scientists, for if his theory is accepted, then many respected scientists will find themselves the subject of much laughter.

That is not to say there is no hope for Terence Meaden's plasma vortex, for it is not inconceivable that the mechanics of "scientific discovery" may yet come into play. Kuhn notes that crises come in two sizes, major and minor, and that it is perfectly possible for a small sub-set of a discipline to undergo a revolution without affecting the larger environment. In this case, it is possible that the plasma vortex might be added into the fluid-vortex bestiary with the, somewhat embarrassing, events surrounding its discovery conveniently forgotten. The rhetorical nature of scientific discovery is discussed by Ron Westrum in his analysis of the way in which the scientific community, which had long refused to believe in the possibility of rocks falling from the sky, despite the repeated testimony of country folk who had seen it happen, suddenly 'discovered' the existence of meteorites ("Science"). Hufford makes the same point in the context of medical systems, noting how Western orthodox medicine repeatedly 'discovers' the efficacy of folk cures and credits the invention to the researcher who first successfully dresses the

findings in the appropriate rhetorical form ("Contemporary").

In the context of scientific discovery, Meaden's vortex has reasonable odds of survival, probably consigned to the marginal position once occupied by ball-lightning until enough of a new generation of scholars have grown-up with the concept to feel comfortable with it. At the moment, as with ball-lightning, it is likely that the vortex will be pressed into service to explain any anomalous ground or atmospheric effect that comes on the scene until its theoretical capabilities are more fully understood. ²¹ For now some progress is being made, notably Yoshi-Hiko Ohtsuki's claim to have recreated crop-circle style markings in aluminium powder in a laboratory. ²² Of course, all this presupposes that the circles effect can be regarded as a natural phenomenon.

Crisis or birth?

Finally, it should be noted that Kuhn clearly distinguishes between research in immature sciences, those that have never acquired a paradigm, and revolutions in mature sciences as they undergo paradigmatic shift. In the former case, Kuhn notes the almost random nature in which facts are gathered up, as compared to the latter in which proponents of competing explanations

²¹ For example ball-lightning was at one point suggested as the cause of the Bell Island lightning strike. It would seem that, protests notwithstanding, the scientific community is often happy to explain one mystery with another and that get back to the business of normal science.

²²Reported in several newspapers in June 1991. Ohtsuki also claimed to have seen "crop circles" on the London Underground trackings, presumably traced by vortices created by passing trains leaving traces in the dust — a discovery no doubt that has tremendous ramifications for the "Circle Line".

concentrate on more localized fact searching. The situation in circles research appears to me to show the interdependence between the birth of a new discipline and crisis in an old one. Crop circles are the subject of interdisciplinary research and those findings are both simultaneously a part of the circles discourse and a challenge to the disciplinary homes of the researchers. For example, although no one is saying crop circles prove that UFOs can not be solid, alien spaceships it appears to be the case that virtually every major circles researcher holds this opinion.²³ There are then two possibilities; either circles research will become accepted as a subject in its own right or it will become subsumed within some other subject, irrevocably altering that subject when it does so.

²³ See page 166 in this thesis.

5.2 Popular Belief and Paradigms

Thus far, this chapter has examined the utility of applying Kuhn's concept of paradigmatic revolution to circles research; now I wish to try to extend the analysis to what would normally be considered as popular belief about the crop circles. It should, however, be born in mind that this thesis has tried to treat crop circle beliefs and explanations as a single ideological field that finds expression in a wide variety of cultural contexts. Specifically, I have concentrated on explanations that appear to exist at a supraindividual level and have explicitly organised this thesis around the expression of such explanations amongst a range of individuals. It is the issue of determining whether it is possible to apply the same paradigmatic analysis to beliefs in oral tradition that I address now.

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There has been very little written about the organisation of folk and popular thought. One of the few relevant articles appears to be by the in-defatigable Alan Dundes, "Folk ideas as Units of Worldview." In this he discusses the possibility of cognitive constructs, such as "bigger is better" or the "principle of unlimited good", that can be said to motivate many expressions to be found in folklore genres, such as proverbs. Dundes particularly notes the cross-generic nature of such concepts as well as their existence in all types of culture. It is a principle that appears to be approached by Kenneth Goldstein from a different perspective when he analyses the concept of "big" as a folk aesthetic ("Notes"). Although there are pitfalls in such analyses, it

is easy for a researcher to start 'inventing' underlying concepts that motivate expressive items, if one sticks to instances in which speakers correlate ideas then nerhans one can get at such units of worldview.

Dundes and Goldstein both addressed the issue of cognitive constructs of

belief; alternatively, one can look at the organisation of belief systems. This is done most comprehensively by Borhek and Curtis in their The Sociology of Relief. Their major effort is in detailing the social construction of belief systems, a subject outside of the scope of this thesis, but in their pursuit of this goal they attempt to analyse belief systems as systems. Most valuably, they propose a typology of belief systems based around several variable characteristics including the complexity of the belief system, its empirical relevance, willingness to take on innovations, tolerance for other systems, degree of commitment it demands from its members, and style of organisation of the beliefs (25-38). They analyse folk belief systems as one type of an organisation of beliefs, in contrast to others, such as elite beliefs and specialized belief systems (34-36), and say of it:

Folk beliefs involve low system, variable tolerance, and low de-

Folk beliefs involve low system, variable tolerance, and low demand for commitment. Empirical relevance may vary but it is, in our experience, usually high. They closely approach a random assortment of norms organised only on the basis of locality and tradition. (35)

These are contentious words and the authors draw their examples from outof-context folk cures and weather lore, perhaps indicating that they have been misled by the huge collections of "superstitions". However their analysis of the complexity of belief systems as it pertains to folk belief is most interesting. The basic premise is that folk belief systems are structurally simple, containing fewer substantive beliefs and less connections between them. According to the authors this is part of what gives folk belief its persistence, for it is possible to invalidate particular beliefs and not have the whole system come creathing down. In the light of this it is useful to examine what can be seen as the substantive beliefs in folk explanations for crop circles to see how empirically viable the sociologists findings are.

Precision. The precise nature of the circles is the one thing that was stressed to me over and over again in interviews. It was even more dramatically the case here in Newfoundland when I showed photographs of formations to people—the phrase "I never realised they were so precise" became almost a cliché. Generally, this description co-existed with other related phrases stressing the "perfectness" of the circles or their symmetry. This observation was generally used to stress that crop circles could not be natural in origin. The best example of this comes in the interview with OE, starting on page 175, where he explicitly states that the precision of the crop circles must be proof of their technological basis. Similarly EP (page 299) stresses that the symmetry and shape of the crop circles are indicative of a hoax. In general, there was a correlation of precision with technology, perhaps in-

dicating the use of a contemporary folk idea to help explain the circles.²⁴
Again, the phrase, "they're too perfect to be natural," occurred repeatedly,
stressing the difficulty that any explanation positing natural causes for the
crop circles inevitably floundered against.

Crop circle definitions. Although it may seem obvious, it should be noted that people defined crop circles as circular marks flattened into crops. Nobody outside of the enthusiasts even considered there to be any relationship between crop circles and other anomalous ground markings. That said, in my position as a crop circle "expert", I was usually asked by those I questioned whether or not crop circles ever occurred in anything other than cereal crops. It is also noteworthy that the American woman on the train (page 180) thought that maybe cropfields were chosen because they were flat

²⁴There is ample evidence of this correlation, perhaps most strikingly illustrated during The Gulf War. In that case, the idea of allied "precision" was constantly opposed to Iraqi technological incompetence and lack of precision. Anti-Iraqi xerox-lore stressed this aspect: for example the Iraqi air-raid shelter consisted of a camel-anus, and the Scud launcher featured a camel with a scud missile in its mouth about to have its genitals hammered by an Iraqi with a very large mallet. See Dear Mr. Thoms 20 (1991): 6-7, for these. This can be seen in contrast with cartoons celebrating the accuracy of the allied weaponry: for example one had an Iraqi general opening a bunker door to see a cruise missile hovering there, and the text ran "President Hussein, I think it's for you!" Although one could claim that this was merely the result of successful military propaganda allied to a certain degree of wish-fulfillment, it seems more likely that the military authorities exploited a pre-existing folk idea - technological precision - rather than generating a new one. The strength of the correlation can be gauged by noting its persistence despite the fact that over 70% of allied missile and bombs "missed" their target, which is to say that they did not land close enough to even slightly damage it. (Reported in a post-war military briefing.)

²⁵The situation is different in Canada where so-called "burnt rings" are popularly treated as a part of the crop circle phenomenon. This issue is dealt with in Appendix B.

and isolated, making perfect alien landing sites.

Spatio-temporal factors. Allied to the structural definition of crop circles, most people had a well-developed idea of where crop circles occurred, in the south of England, and for how long they had been occurring, a few years. The spatial dimension was most usually identified as Salisbury Plain, evidence of either military or mystical origins. Temporally most people assumed that crop circles are a modern phenomenon although most of those who saw a UFO connection appeared to believe that circles had been occurring for a long time. For example the conversation with OE (page 175) elicited his opinion that crop circles had been occurring since at least the 1960s. Another informant, IS, (page 177) appeared to believe that crop circles had been around for a long time, and the bookstore keeper (page 143) appears to believe that they have been "around for centuries."

Types of formation. This appears only to be of interest to those who see the crop circles as landing marks. In this case the standard quintuplet formation is often characterised as the landing marks of a flying saucer and its four legs. It is also notable that people often use either astronomical referents (one woman described a ringed circle as "Saturn shaped" [Circular Evidence 67]) or science-fiction referents, most generally to do with TV series such as "Star Trek" or "Dr. Who". A symbolic analysis of circles appears to be restricted to enthusiasts, but I did collect a few cases in which people

thought that crop circles might be "ancient symbols' and a few more who thought it was relevant that they occurred in the same places as stone circles.

Existence of attested hoaxes. The fact that circles can be made by hoaxers and that some circles have been proved to be hoaxes, most notably the Bratton example, is used by many as proof that the rest probably are. Usually this takes the form of "I saw some people make one on TV and it looked quite easy." There have also been various articles in newspapers demonstrating methods of creating crop circles. Furthermore, the standard chain-and-pole method produces almost perfect circles of flattened crop, meeting the general folk definition of a crop circle.

Life in space. This final category was something I encountered much more explicitly in Newfoundland. Basically, the argument is that it is inconceivable that humans could be the only intelligent species in the universe, therefore it is perfectly possibly that a more developed alien species is responsible for the the crop circles.

As with circles research the data above can be seen as providing the loci of the explanations for the crop circles. Those who hold a hoax explanation use their precision to deny any natural basis to the circles, point to the possibility of hoaxes, and sometimes to the spatio-temporal distribution of the circles. On the other hand, those who believe that circles are caused by spaceships point also to the precision of the circles and spatio-temporal factors, and include the form of the circles, and the possibility of life on other worlds. Those who espouse a natural, meteorological theory generally appeal to its scientific legitimacy but may also include accounts of whirlwinds doing roughly similar things. Similar analyses can also be done for other explanations.

5.2.1 The nature of folk paradigms

It can be seen that there are qualitative and quantitative differences between the explanations of the non-specialists and the circles researchers' formulations. Many of the differences can be put down to amount and type of information that is disseminated to the general public. Although Circular Evidence was a best-seller, the vast majority of the people in the UK probably have never even heard of the book. The major source of information for most people has been newspaper coverage, which has tended to concentrate on the more spectacular formations and aerial photography, showing the overall structure but not the fine detail.²⁰ Consequently the various arcane

⁵⁸Randles and Fuller consistently describe the circles phenomeron as a media myth, Fuller particularly in hard on the newspapers. However, with the exception of Today, the daily newspapers have taken a very skeptical line, treating crevological explanations as ources for humour. The influence of the media is an important factor in the dissemination of crop circle information and useful insights can be gained by applying "gatekepper" analyses to the spread of information (Lewin; White). Although it is the case that the media plays the crucial role in spreading information, I think it is overly simplistic to accribe the strength of cereological beliefs to media influence; the choice of photographis does tend to reflect the evidence used by cereologists but the commentary itself is almost overwhelmingly anti-recreological.

details of crop circles are not available to most people and their explanations have to be constructed accordingly. In this respect it can be seen that the popular versions of the explanations are simpler in the amount of detail they have to account for. Does it then follow, as predicted by Borhek and Curtis, that folk explanations have a lesser degree of system?

If the folk explanations for crop circles display less system, then one might expect non-scientific explanations amongst enthusiasts to be less complex than the scientific ones, for Borhek and Curtis explicitly state that scientific belief systems are marked by their extreme complexity (118-119). This patently is not the case in this subject, as the exposition thus far in this thesis should have shown. It would seem that the different explanations amongst cuthusiasts differ in their selection of evidence and in their choice of rhetoric but are remarkably similar in their complexity.

It is true to say that folk explanations are held by people with less exposure to less interest in and less commitment to the phenomenon than the circles researchers. If any one of the explanations were to be proved irrefutably correct then the circles researchers who proposed any of the opposing explanations would probably find their reputations destroyed.²⁷ Also the major circles researchers spend virtually all of their free time in investigation of the subject, for them the subject involves a very high degree of voluntary commitment. This is not so for the vast majority of people in

²⁷If this ever were to be the case, it would be interesting to compare the resulting reactions with those reported by Leon Festinger et al in their study of a failed prophecy.

the UK. It is the case that circles researchers have focussed on crop circles and constructed belief systems, explanations, around them. On the other hand, folk explanations seem to be based on the slotting of crop circles into pre-existing belief systems. Consequently, the complexity in folk helief about crop circles is more likely to be found in the pre-existing worldview. ²⁸ For example, for some people the 'precision' of crop circles is used as evidence for their technological origin, drawing upon their pre-existing belief that technology equates to precision. Similarly those people who believe that crop circles are caused by atmospheric vortices have generally seen whirlwinds or other similar phenomena in action, thus they have an extant agent for the circles effect.

Another point is that people vary in the amount of information that they have been voluntarily (or involuntarily) exposed to. Those who have had circles occur on their land or who have been witness to the formation of a circle possess a whole body of experiential evidence that is simply not available, except by testimony, to even the most ardent circles researchers. These people have had their opinions and perceptions disseminated throughout the circles enthusiasts and thus can be seen to be feeding directly into the information about the phenomenon. One eye-witness, Sandy Reid, is, apparently, writing a book about his experiences. Similarly, those people who have created hoax circles and then talked about it afterwards (as EP thought a friend

²⁸I owe this point to Diane Goldstein.

had done — page 195) are contributing information that would appear to have a great degree of influence at local levels. Admittedly these people are very few in number (though probably more numerous than dedicated circles researchers), but they can be said to be privy to esoteric knowledge and presumably construct their beliefs accordingly.

It is, however, the case that the vast majority of people in the UK have only ever heard of crop circles second hand, their information being based on photographs in newspapers and maybe snippets broadcast on TV. Occasionally, as with George Wingfield, such people may find their curiousity piqued enough to try to find out more and end up with their lives ineradicably altered. For most, talk with friends or maybe a chance encounter with an expert provides the only forum for debate.

Finally, it is notable that those people who espoused some type of cereological explanation tended to know more about the subject than others and this may well be down to an increased interest engendered by the explanation. This is to say that to believe in the ETH is to believe in an officially unsanctioned belief, it has been denied scientific legitimacy, its believers are usually portrayed as 'flying saucer cranks' and it is therefore vulnerable to ridicule. Consequently, to believe in the ETH is to fly in the face of 'official' belief, requiring therefore that the believer be prepared to do so; inevitably cusuring that as a belief system the ETH ensenders a higher degree of commitment and a consequent increased interest in validation.29

It does appear to be the case that the folk expression of crop circle explanations focus on a restricted sub-set of the phenomenon when compared with researchers' theories. Amongst themselves, however, folk explanations do vary in their complexity and the amount of detail they explain. For example, the meteorological/scientific explanation appears to approach the status of single belief in the efficacy of science, whereas those who hold a cereological explanation generally appear to have a more detailed set of heliefs about crop circles. This runs somewhat contrary to the popular stereotype that those who 'believe in' UFOs or other anomalous phenomena do so because of unthinking acceptance. It would seem that the complexity of such explanations comes from within a pre-existing belief system.

In a sense it is possible to see paradigms as somewhat similar to, or possibly a sub-set of, worldview. Much of the work on worldview appears to show the way in which it informs everyday activity at an unthinking level.³⁰ It

³ºSee Borhek and Curlis, 89-109 for a discussion of the relationship between commitment and willadiant); restinger et al. also provides an insightful case study, Interestingly, the situation here in Newfoundland, and seemingly prevalent throughout North America, is somewhat different, possibly due to the so-called SETT (Search for Extrastrestrain Intelligence) programmes. The fundamental hypothesis of this scientifically legitimate theory is that it is possible to communicate with extrastrestrain intelligence through radio waves. SETI proponents tend to be the most powerful enemies of the ETH for UFOs, probably because they would be out of a job if allen space-finish were already visiting. However the (grudging) scientific respectability granted to SETI programmes, including occasional criteria to the scientific respectability granted to SETI programmes, including occasional criteria believe there are allens out there then why should not 1½ fold? The relationship between SETI proponents and American ufologists is analysed in Westrum et al. "Little Green Men."

³⁰ The classic analysis is Barre-Toelken's "Folklore, Worldview and Communication,"

would seem that, like a paradigm, a person's worldview delimits their understanding of the way the world works. A person with a scientific-rationalist worldview, akin perhaps to one of Gillian Bennett's opposing philosophies (Traditions), has only certain folk ideas from which to construct an explanation. So, for a rationalist the concept of 'technological precision' either has to be ignored — no one I talked to used it as evidence for a natural origin to crop circles — or else one has to look to human technology for the answer. This may explain why so few people were willing to accept the meteorological theory, for it seems to fly in the face of a commonly held belief, and why those who did appeared to do so as an act of faith.

The implication of such an analysis is that crop circles have not provoked a paradigmatic revolution amongst the general public. Instead it would seem that crop circles have been fitted in to existing belief systems: as proof of the extra-terrestrial origin of UFOs, for example. This may change, but so far it has only been a small trickle of individuals that have been so affected. As a somewhat heartless experiment, I gave a frank description of various crop circle features (non-circularity, gap-seeking, eye-witness accounts) to a Newfoundland woman who had frequently stated that she believed that crop circles were the result of UFOs landing. I maintained a non-didactic style and was responding to a direct request from her for more information, but as I spoke I could see her face cloud and when she spoke she did so in a subdued

He demonstrates, for example, that trying to force Native Americans to sit in straight lines in fixed seats in a classroom causes them physical distress.

tone: a classic exhibition of a crisis in her beliefs, provoked, in this case, by an exposure to esoteric knowledge about the phenomenon.³¹

The text should by now have indicated the role that explanations play in belief systems. It would seem that they form a subset of worldview. They are not "folk ideas" but instead can make use of such ideas. Although the statement, for example, that a crop circle is made by a UFO landing is a simple dite, it is also a label for a complex of substantive beliefs. In a sense, explanations and paradigms demark certain portions of belief systems, providing native categories of information about the world. These explanations are also supraindividual and are not necessarily carried by social institutions. They seem more readily carried by communication, whether through folk, popular or technical channels. Consequently, whether one wishes to talk of channels of communication, levels of culture or of some other formulation of the concept of folklore the use of paradigms allows a certain formulation of the relationships between different beliefs. It seems to me that in terms of the crop circle phenomenon there are several traditions of belief that have spawned explanations and the expression of these explanations can vary in much the same way as an other genre of folklore. Whether the explanation is written in a scientific journal or discussed over a pint in the pub. it remains part of a unified ideological field.

³¹ Compare with Festinger's description of "cognitive dissonance."

5.3 Explanation as Genre

The thrust of this chapter has been an analysis of explanations as paradigms of thought, both throughout circles researchers and as they exist amongst 'the folk'. It is, however, possible to look at them another way: as a genre. This would seem to run contrary to most of what has been said above: for example, Dundes explicitly states that he believes "folk ideas" to be cross-generic, capable of being expressed in a wide variety of genres as well as folk and non-folk contexts (95-96). Much the same would seem to be true of explanations; as ideal constructs they have been shown to underly cartoons, advertisements, jokes and possibly many other expressive forms. Yet previously I asserted that explanations seemed to show many of the characteristics that one would normally ascribe to a genre. The solution to this seeming paradox is, I believe, to differentiate between explanations as abstract, ideal constructs and explanations as items of expressive culture. This thesis has concentrated on the former, but at this point it is useful to make a few notes on the style and context of explanatory forms.

The dichotomy above was initially suggested to me by the strange behaviour of friends and acquaintances when they discovered my research topic. After an initial move, which was usually to ask me what caused the crop circles or occasionally to tell me what they thought, I would find myself bombarded with colourful and humorous explanations for crop circle origins. At first I was content to dismiss these 'explanations' as the inevitable side-effects. of doing something generally perceived as 'weird', but eventually I began to realise that similar motifs reoccurred, the context was usually similar and the attitude of the jokers was always one of scepticism. I began to wonder if maybe I was inadvertantly providing a context for these joke explanations and if other such contexts existed.

My experiences were not unique, other circles researchers reported that they, too, have been bombarded with all manner of explanations, from the absurd to the almost plausible. Paul Fuller remarked during an interview³² that people seemed to love coming up with "weird" explanations, echoing Jenny Randles' words during the BUFORA lecture:

You've probably seen and heard all of the wild, daft ideas that people are coming up with all the time...but usually they just come up with them for fun, they're not serious attempts to explain what's going on.³³

It would seem that circles researchers draw a line between explanation and joke, one that is exemplified by the anomalous nature of the "hedgehog" explanation, a joke that occasionally gets taken seriously. The distinction is further confused by the existence of a large number of idiosyncratic beliefs sincerely held by a small number of individuals. For example Chris Rutowski mentions one individual who claims that crop circles are made by hot-air balloonists who attach rotors to the bottom of the baskets which create the crop

³² September 1990, actual words lost due to tape malfunction.

³³Jenny Randles, BUFORA lecture September 1990, tape 1 side rev. 175-178. Ellipsis marks long pause.

circles as the balloon drifts by. 34 I came across a similar explanation from an individual who thought that crop circles were caused by "yuppies" taking balloon or helicopter flights and stopping in remote fields to eat picnics, hence all the strange shapes. Despite their humorous aspects, both of these explanations were offered as possible mechanisms for crop circle production.

I do not have enough data yet to make any claims about the nature and context of the use of joke explanations; during my fieldwork I came across only one example of crop circle explanations becoming the focus for a discourse, and I was unable to record it at the time. I can, however, make some suggestive remarks based on my observations.

The events took place amongst the staff of a night club after closing hours and were started by one of them, a friend who knew I was interested in crop circles, making a remark to the end that all the drunks were off to urinate in the fields and make crop circles. This was towards the end of August and suddenly sparked a debate. One woman said she had seen crop circles on TV and didn't think they could be natural, another asserted that she had seen the army make one on TV and it looked perfectly easy. However, rather than becoming a polarized debate it evolved into a joking competition. The glass collector said he reckoned it was probably Hell's Angels making circles with their bikes, another said no, it was probably hippies on drugs. At this point, the bar-manager intervened and said, seriously, that he thought that

³⁴ Personal communication.

there "has to be something in it." This lead to a small silence before the disc-jockey suddenly claimed that he "knew" what caused them. He then proceeded to tell a long narrative about how crop circles were really dance-floors for aliens and claimed to actually have been a disc-jockey at several of them. This, he stated, was why people heard weird sounds and saw strange lights around about crop circles. This explanation terminated the discussion as people decided to start going home.

Although the above occasion is unsatisfactorily recorded, and to be honest, although did interview most of the participants afterwards this kind of material was secondary to my main interest, there were several notable features. The most striking was an uneasy tension between the humorous side and the serious. It started off llippantly, and only the bar-manager appeared to have enough status to inject a serious comment into the events, occasioning an uneasy pause until the disc-jockey came in with his long narrative. This tension seemed also to be reflected in the content of the explanations, which seemed to be generated by an aesthetic: that they should be humorous bluic at least superficially plausible. There did seem to be a very strong aesthetic favouring imagination and creativity, yet at the same time the explanations generally conformed to one or the other of the explanatory paradigms. Finally, the style of the event was very rancous, people were fighting to be heard, explanations were pared down to a bare minimum, and there was continuous interruption, laughing and correction. After the bar-manager's interruption the disc-jockey was given much more silence, being interrupted only after he had 'revealed' the origin of the circles and started to justify his reasons.

It can be seen that in structure and style the event appears very close to the descriptions of legend-telling sessions. Although there was no formal setting for it, the event was marked by a change in the level of interaction amongst the participants, voices became markedly louder, the whole staff became involved and extremely animated, it almost seemed like a free-for-all. Before and after the discourse, people were talking quietly in small groups, gathering up their belongings and generally winding down after a busy night. That said, there are noticeable differences. There was no group effort to construct a narrative but more of a competition between individuals. There was no reality checking except as a rhetorical device of the nature, 'it can't be so and so because of this, the real explanation is...' There was no attempt at group validation, or invalidation, aside from perhaps the initial moves and the bar-manager's intervention, rather the occasion seemed to be structured as a joking competition with specific rules which used crop circles, and their associated explanations, as the subject material.

Obviously this one occasion is too little on which to base an analysis. I would say, however, that my interest in crop circles does provide a continuing context in which explanations, as a genre, can be given to be me by friends

³⁵ See for example Degh and Vazsonyi, "Legend and Belief"; Bennett, "Playful Chaos".

and acquaintances. Overwhelmingly, these explanations are jokes of varying degrees of plausibility, but sometimes they take a more unusual form and, always, they are offered to me without elicitation. For example, one of my flat-mates suddenly told me that her father had "seen hundreds of crop circles on the banks of rivers." When I asked her for further information she told me that he said that they were caused by moose lying down. At another time, a folklore undergraduate excitedly told me that she and a friend had just 'made' some crop circles. Again, when I asked, she said that the two of them were trying to cut long grass with a "weed-cater" and, a couple of times, because the grass was so thick they only succeeded in flattening small circles which she described as being "just like crop circles." Apparently, at the time when they accidentally made these circles they got quite excited about it. 26

fered in this style can be seen in the circles discourse over electronic media, especially the newsgroups "alt-paranormal" (a forum for the discussion of paranormal events) and "sci.skeptic" (a forum for skeptical comments). There has been little information in the summer of 1991, so the number of messages dealing with crop circles has been low, less than fifty, but mixed in with the debate about crop circle origins have been several humanous

A final example of the contexts in which explanations appear to be of-

³⁰I showed this paragraph to the woman concerned to check whether she approved of its being used, and she commented that the reason they found the event interesting was not that they thought that "giant weed-eaters" were responsible for the circles but that the event seemed to indicate what kind of effect would be needed to create a crop circle.

items. Again, there does seem to be similar aesthetic and system of rules, sometimes parodying "serious" explanations, and sometimes coming up with totally original ideas. The latter case is seen below, in which one user. John Stach, concentrates on a pun: "cereology — the study of breakfast foods."

Now I get it! Cheerios, apple jacks, and all those other crispy little O's that make our mornings so pleasant. It all makes sense

As we all know, in secret labs all over the world, research cereologists have been searching for the secret of how to make those little O's stay crunchy in milk. The secret is in the grain!

However, in creating the perfect grain with painstaking training by showing the grain soggy O's and giving them electric shock and then showing them crispy O's and giving them water, some of the grain has rebelled and formed a potent underground (literaly).

This may sound corny (literaly), but the crop circles are evidence of suicide pacts to demonstrate against the push for crisper cereal. That's why they form large O's. So that everyone can see what the evil scientists are doing. All these other explanations are red herrings planted (literaly) by evil scientists (esp. cereologists) to keep us from stalking (literaly) the truth.

John

now.

I'll be right alongside them outstanding in my field³⁷

³⁷John Stach, sci.skeptic, 18 June 91, Message-ID: 25538@unix.SRI.COM. Original form and spelling maintained

5.4 Conclusions

In closing this thesis I would like to suggest a way of combining all that has gone into a whole. So far, I have suggested that the various explanations seem to operate in the same ways as Kuhn's paradigms, albeit for a subject outside of the field of scientific research. The delineation of these explanations was initially guided by popular conception, most peeple seem to divide the explanations into the cereological, meteorological, boax, and 'other' categories, and I have suggested that these explanations can be differentiated in the evidence they seek to explain. It also seems that these explanations fit into a traditional paradigm (In the non-Kuhnian sense of the word) in that various other phenomena have been explained in terms of scientific, rationalist, supernaturalist and other theories: Plot's analysis of fairy rings being a prime example. It would seem that these "slots" are somewhat similar to worldview or to Gillian Bennett's concept of philosophies. I would suggest that there are four factors that are important in the determining of crop circle explanations.

Worldview. Worldview can be seen as operating in a similar way to a paradigm in that it delimits an individual's concept of reality. For a rationalist, crop circles are not something that needs to be explained except in terms of human psychology. To someone who is prepared to accept that there are more things on Heaven and Earth than we have begun to even imagine,

crop circles may be a mystery. That is not to say that someone who believes in other 'paranormal' phenomena must necessarily hold a supernaturalist explanation for crop circles. For example, Bob Rickard is a respected cataloguer of Fortean events who tends to the view that crop circles are hoaxes. It would seem then that, amongst other things, worldview is constituted by several explanations.

Folk ideas. Dundes describes these as units of worldview, a more useful description might be "shared assumptions". These are concepts held by individuals of widely differing worldviews that seem to be shared amongst a community or society. Such assumptions are not limited to folk or popular culture, for example David Iland shows that several "folk theorems" exist in mathematics, and appear to exercise a surprisingly large influence therein. In the case of crop circles their oft noted precision coincides with a cultural assumption that precision is the result of technology.

Social context. This appears to affect both the form and content of explanations (Borhek and Curtis). Amongst circles researchers the notion of belonging to a certain community crucially affects the degree of system of their beliefs. In folk and popular belief contexts the perceived status of the different explanations affect their uptake. For example, holders of cereological explanations tend to have a greater degree of complexity in their beliefs about crop circles precisely because the explanations are socially illegitimate. Similarly one would expect that members of specific groups whose belief systems are affected by the crop circle phenomenon, (dowsers, meteorologists, New Age proponents) would be expected to construct their explanations in accordance to the group norm. to the same after a to the to

Information. One must form one's beliefs with respect to the available information. Thus circles researchers, who are privy to the highest quantity of information, tend towards explanations that encompass such esoteric knowledge. Others, such as farmers, who have involuntary exposure to the phenomenon and for whom it often means a loss of money and time seem to be being driven to the hoax explanation. Finally, there are those, the vast majority of people, who have access to information that is both qualitatively and quantitatively different from that of the circles researchers, and who must construct their explanations accordingly.

Taking the above into account, individuals construct explanations as rationally and coherently as possible. The other possibilities are then dealt with through the rhetoric of disbelief. Although the particular expressions conform to the subject at hand the particular strategies are traditionally based. Borhek and Curtis approach this point when they look at methods by which believers attempt to invalidate competing belief systems (130-132), and the strategies appear to be the same whether they are being used im-

³⁸It should be noted that circles researchers vary in the information they use. For example many cereologists take heed of the messages of channelers.

plicitly by academics or explicitly by someone who accuses a UFO percipient of "drinking too much."

These explanations act paradigmatically. To the woman who thought there was nothing mysterious about crop circles, the tracks left by a tracfor turning in a field presumably did form a crop circle. (See page 220.) Similarly the Scandanavian farm worker whose worldview contains creatures who would punish someone found sleeping would explain his experiences in precisely that way.39 It should, however, be noted that Kuhn explicitly rejects a logical-positivist interpretation of paradigmatic explanation. Such a theory asserts that one receives "raw" sense data - perceptual stimuli that is then interpreted according to cognitive constructs. 40 It is this that allows Honko's traditional-psychological analysis. Instead, Kuhn postulates that maybe paradigms are inextricably wedded with perception. (119-125). His argument is not fully expressed, but it has intriguing implications for supernatural folk belief studies. In the present case, when someone like Paul Fuller or Terence Meaden looks at a crop circle what they see is an example of a damaging vortex descent, they see random damage dotted about the countryside.41 To a cereologist, such as George Wingfield, crop circles are precisely shaped messages flattened gently into the cereal fields, something conceptually at odds with random damage. Taking this further, the Scan-

³⁹ See the discussion of Laurie Honko's work earlier.

[&]quot;See Lacey's discussion of positivism, 165-167.
"The actual word damage is used frequently by meteorologists. Note also the discussion of croo circle naming in section 4.1.1.

danavian peasant did not receive a stimulus and then interpret it according to his explanation; he saw a barn spirit.

A model such as this is intriguing, for it provides a possible escape route, if one is wanted, from the dominance of logical-positivistic thinking. It also poses some interesting questions for the methodology of even the most recent folk belief scholars. For example, David Hulford's phenomenonological method presupposes the existence of uninterpreted phenomena, perceptual stimuli, that act without regard for tradition or interpretation. Similarly, Rejewice's Extraordinary Encounter Continuum hypothesis asserts that such encounters can be deconstructed by attempting to recover the original phenomena, and then reconstituted in some type of analytical typology. A Gestalt theory such as Kuhn's is somewhat at variance with such a hypothesis. It would seem to imply that Hulford's analysis of the fundamental stability of certain features in supernatural assault narratives is an example of paradigmatic reinterpretation by Hulford, in this case in the context of medical symptomatology.

Whether such an approach is useful, yet alone appropriate, is not currently clear. It may however prove useful in the analysis of how individuals come to try to understand anomalous events and incorporate thorn into their lives. For example, a lot work on Near Death Experiences (NDEs) has commented on the way in which such events appear to be life-altering occurrences (Moody; Lundahl) and Bullard notes the same for UFO-abduction victims. It may well be fruitful to talk about the process by which this happens in terms of paradigmatic revolution in response to a crisis. It may well also provide a useful tool in the analysis of various type of supernatural encounter narratives: for example, the "witness" style of memorates may be a necessary result of the speaker trying to find a paradigm. It may be useful to look at the discourse surrounding mysteries such as lake monsters, Bigfoot sightings, Elvis encounters, and UFO experiences, in terms of competing explanation rather than as polarized debate about their postulated truth or falsity.

Such speculations are for the future, if at all. I make no great claims about having discovered some wonderful new theory, this chapter should be seen more in the nature of a thought experiment. Many have been struck by the mystery of the crop circles and have struggled to come to an understanding of them. Whatever their origin the circles have presented a challenge to all who have studied them, burning away easy explanations with each new turn of the mystery. This document is merely my response.

Appendix A

The Mowing Devil

Men may dally with Heaven, and criticise on HeII, as Wittily as they please, but there really are such places, the wise dispensations of Almighty Providence does not cross continually to evince. For if by those accumulated circumstances which generally induce us to the belief of anything beyond our senses, we may reasonably gather that there are certainly such things as DEVILS, and we must necessarily conclude that these Devils have a HeII; and as there is a HeII, there must be a Heaven, and consequently a GOD; and so all the duties of Christian Religion as indispensable subsequents necessarily follows:

The first of which Propositions, this ensuing Narrative does not a little help to Confirm.

For no longer ago, than within the compass of the present Month of August, there happened so unusual an Accident in Hartford-shire, as is not only the general Discourse, and Admiration of the whole Country; but may for its Rarity challenge any other event, which has for these many years been Produc't in any other Country whatsoever. The story thus.

In the said County lives a Rich industrious Farmer, who perceiving a small Crop of his (of about three Half-Acres of Land which he had Sowed with Oats) to be Ripe and fit for Gathering,

THE MOWING-DEVIL: OR, STRANGE NEWS OUT OF HARTFORD-SHIRE.

Being a True Relation of a Farmer, who Bargaining with a Poor Mower, about the Cuiting down Three Half Acres of Oais; upon the Mower's asking too much, the Farmer swore That hie Devil should Mow it enther than He. And so it fell out, that very Night, the Grop of Oat shew'd as if it had been all of a Flame; but next Morning appear'd so neathly moved by the Devil or some Infernal Spirit, that no Mortal Man was able to do the like.

Also, How the said Oats ly now in the Field, and the Owner has not Power to fetch them away.

Licensed, August 22nd, 1678.



Figure A.1: Frontispiece to the "Mowing Devil" pamphlet.

sent to a poor Neighbour whom he knew worked commonly in the Summer-time at Harvest Labor, to agree with him about Mowing or Cutting the said Oats down. The poor man as it behoov'd him endeavour'd to sell the Sweat of his brows and Marrow of his Bones as at dear a rate as reasonably he might, and therefore askt a good round Price for his Labour, which the Farmer taking some exception at, bid him much more under the usual Rate than the poor man askt for it: So that some sharp words had past, when the farmer told him he would Discourse with him no more about it. Whereupon the honest Mower recollecting with himself that if he undertook not that little Spot of Work, he might thereby lose much more business which the farmer had to imploy him in beside, ran after him and told him that, rather than displease him, he would do it at what rate in reason he pleas'd; and as an instance of his willingness to serve him, propose'd to him a lower price, than he had Mowed for any time this Y. or before. The irritated Farmer with a stern look, and hasty gesture, told the poor man That the Devil himself should Mow his Oats before he should have anything to do with them, and upon this went his way, and left the sorrowful Yeoman, not a little troubled that he had disoblig'd one in whose Power it lay to do him many kindnesses.

But, however, in the happy series of an interrupted prosperity, we may strut and plume our selves over the miserable Indigencies of our necessitated Neighbours, yet there is a just God abover, who weighs not by our Bags, nor measures us by our Coffers; but looks upon all men indifferently as the common sons of Adam; so that he who carefully Officiates that Rank or Station wherein the Almighty has plac't him to' but a mean one, is truly more worthy the Estimation of all men, than he who is prefer'd to superior dignities, and abuses them: And what greater abuse the contempt of Men below him: the relief of whose common necessities is none the least of the Conditions whereby he holds all his God things; which when that Tenure is forfeited by his default, he may justly expect some Judgement to ensue; or else that those riches whereby he prizes himself so extravagantly may shortly be taken from him.

We will not attempt to fathom the cause, or reason of, Preternatural events; but certain we are, as the most Credible and General Relation can inform us, that that same night this poor Mower and Farmer parted, his Field of Oats was publikly beheld by several Passengers to be all of a Flame, and so continued for some space, to the great construction of those that beheld it.

Which strange news being by several carried to the Farmer next morning, could not but give him a great curiosity to go and see what was become of his Crop of Oats, which he could not but imagine, but was totally decour'd by those ravenous Flames which were observed to be so long resident on his Acre and half of Ground.

Certainly a reflection on his sudden and indiscreet expression (That the Devil should Mowe his Oats before the poor Man should have anything to do with them) could not but on this occasion come into his Memory. For if we will but allow our selves so much leisure, to consider how many hits of providence go the production of one Crop if Corn, such as the aptitude of Soyl, the seasonableness of showers, Nourishing Solstices and Salubreous Winds &c., we should rather welcome Maturity with Devout Acknowledgements than prevent our gathering of it by our profuse wishes.

But not to keep the curious Reader any longer in suspence, the inquisitive Farmer no sooner arriv'd at the place where his Oats grew, but to his admiration he found the Crop was cut down ready to his hands; and as if the Devil had a mind to shew his dexterity in the art of Husbandry, and scorn'd to mow them after the usual manner, he cut them round in circles, and plac't every straw with that exactness that it would have taken up above an Age, for any Man to perform what he did that one night: And the man that owns them is as yet afraid to remove them.

Appendix B

The Canadian Crop Circles

The major organisation investigating the crop circles phenomenon in Car dia, and in North America generally, is the North American Institute for Crop Circle Research, the NAICCR. It is run primarily by Chris Rutowski, a ufologist of long-standing, at the University of Winnipeg. Rutowski has a long history of interest in UPO ground traces and investigated a series of marks in Saskatchewan in 1975 that appear to crop circles. He and Michael Chorost, who works closely with Colin Andrews, appear to the the major researchers in North America. Whereas Chorost's colours are nailed firmly to the cereological flag, Rutowski takes a "post-structuralist" stance, regarding the various explanations as valid in their own terms. In Canada, Chris Rutowski appears to have become the acknowledged expert, being

¹Photographs of these appear in Hynek and Vallee.

²Personal communication.

retsonal continuncation.

interviewed in most cases whenever a story about the circles phenomenon is printed.

The NAICCR report gives data for 86 Unidentified Ground Markings (UGMs) reported in 1990 of which some 31 appear to be crop circles. Of these crop circles, 16 appear to have occurred in grass and 14 in cereal crops.³ Of those 14 in cereal crops, 6 occurred in Canada and the rest in the US. It can be seen that this is an extremely small number in comparison to the vast numbers of formations found in the UK in 1990. Furthermore, with one exception, all of these were either simple or ringed circles.

The most noticeable difference between the Canadian crop circle phenomenon and British one is the inclusion of "burnt rings" as part of the phenomenon. Such marks are comprised of a ring of 'burnt' grass about one fuot in width that forms a circle. Photographs and videos that I have seen show the 'burnt' area as one which looks as though it has been parched, with the crop dying back due to lack of moisture. There are also examples of complete circles being burnt in this way, usually in grass. This class of phenomena which is totally divorced from the crop circle phenomenon in the UK appears to be seen as part of it here in Canada. Partly this may be due to a case from Port Lawrence in Nova Scotia this April.

The case in Nova Scotia drew national attention in Canada with news reports and location videos being broadcast on CBC news-programmes on

There is a discrepancy in the data due to occasionally incomplete reports.

both TV and radio. It is an interesting example because it was reported totally within the context of the crop circle phenomenon. For example The Evening Telegram reported that:

Similar rings on farm fields have been puzzling people recently in the Prairie provinces, the U.S. midwest, England, Australia and Japan. Theories about the cause have ranged from whirlwinds to extraterrestrial spaceships. (21 Apr. 1991; 36)

The ring was al. at one-third of a metre wide and ten metres in diameter and was discovered by the land-waver shortly after the Winter snow melted. It quickly became a tourist attraction with the farmer, Reg Painter, commenting that "large numbers of people had come to visit at." The inclusion of this ring within the crop circle phenomenon may also have been encouraged by the revelation that the farmer had moved from England three years age: apparently some locals were commenting that perhaps the crop circles had followed him to Atlantic Canada.

It would seem that in Canada we have a subby different paradigm at work in which crop circles constitute only a part of the phenomenon. Paul Fuller commented that he was not surprised that such markings were being included because 'burnt circles' are a part of the 'UFO myth' (personal communication). His argument is that the extraterrestrial hypothesis (ETH) represents the dominant "supernatural" explanation for the crop circles and that therefore they are included as part of the evidence for the existence of

⁴ The Chronicle-Herald Provincial ed. 22 Apr. 1991: A1.

alien spaceships.

This seems to be a fair assessment of the situation: in my interviews here in Newfoundland I found no one who espoused the cereological explanation of circles as communication. As the interviews in the main body of the text show most people seemed to believe that the circles were the by-products of UFO activity, or in the case of PS (page 178), the deliberate leaving of evidence by UFO occupants, which appears to be an explanation that bridges the ETH and creeological viewpoints. Chris Rutowski's findings seem to parallel mine; he comments that the "overwhelming majority seemed to believe that aliens were responsible," (Personal communication).

For the moment then, it would seem that there is fairly widespread acceptance of an ETH explanation for the crop circle phenomenon throughout Canada. This would seem to be at least partly due to the fact that crop circles in this country exist in much smaller numbers and much less complex shapes then in the UK; thus providing less of a challenge to the ETH. In general, there appears to be a more widespread acceptance of the ETH explanation for UFOs here than there is in the UK, and I would suppose that this will make the explanation more resistant to change. So far, as of writing this (16th August), there have been no reports of crop circles, other than the Nova Scotian burnt ring referred to above, in Canada or North America. Consequently there has been little reason for people to modify their views.

Appendix C

Useful Addresses and Sources of Information

Crop Circle Organisations

THE CENTRE FOR CROP CIRCLE STUDIES (CCCS) PO Box 146, Guildford, Surrey, GU2 5JY.

UK.

No corporate view, affiliated to most other circles organisation. The society was formed in April 1999 and has inspired an anthology of articles: Ralph Noyes, ed. The Crop Circle Enigma. It publishes its own journal, The Circular, and organizes a series of lectures in the UK. Membership available.

CIRCLES EFFECT RESEARCH UNIT (CERES) 54 Frome Road, Bradford-Upon-Avon.

Wiltshire,

BA15 ILD,

EK.

Run by Dr. G. T. Meaden, exposses the meteorological theory. No formal membership. The Journal Of Meteorology UK publishes the vast bulk of Dr. Meaden's work. Associated with the Tornado and storm Research Organisation (TORRO).

CIRCLES PHENOMENON RESEARCH (CPR)

Sarum,

57 Salisbury Road, Andover.

Hants SP10 2LL

IIK.

on.

Run by Colin Andrews it is the strongest advocate of a cereological view. Publishes its own newsletter.

NORTH AMERICAN INSTITUTE FOR CROP CIRCLE RESEARCH (NAICCR)

Box 1918,

Winnipeg, Manitoba R3C 3R2

Canada.

Run by Chris Rutowski. Best source for information about North American crop circles. No corporate stance.

Crop circle periodicals

Circles Phenomenon Research Newsletter — cereological standpoint.

Editor: Pat Delgado CPR Satellite Office.

117 Ashland Lane Aurora

OH 44202.

The Crop Watcher - meteorological standpoint.

Editor: Paul Fuller. 3 Selborne Court, Tavistock Close, Romsey, Hampshire SO51 7TY

The Circular --- no official standpoint. Editor: Bob Kingsley. Specialist Knowledge Services,

St. Aldhelm, 20 Paul Street,

UK.

Frome, Somerset BA 11 IDX,

UK. Note: Free to CCCS members.

The Journal of Meteorology UK - meteorological theory. Editor: George Terence Meaden, 54 Frome Road.

Bradford-Upon-Avon, Wiltshire, BA15 1LD.

UK.

The Cerealogist - no official standpoint.

Editor: John Michell. Specialist Knowledge Services,

St. Aldhelm,

20 Paul Street, Frome,

Somerset BA11 1DX,

UK.

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