

The Cruel Stepmother and the Good Father Who Will Not See

Keynote Address Delivered at the International Herb Symposium
Wheaton College, June 20, 2009

Copyright © 2009, All Rights Reserved, Stephen Harrod Buhner

I thought that I might talk about fairy tales tonight because we are living in a time of great literalism, a time in which the importance of invisibles is being forgotten.

And as always in literal times, one of the first things that dies is memory. With the death of memory invisibles began to fade away, invisibles such as love which no one can hold in a hand yet which is crucial to a whole life, invisibles such as the particular feeling that comes to all of us now and then telling us that an act we're taking is wrong in spite of the sensible mental arguments being marshaled for taking it.

And so I thought I would talk about fairy tales, perhaps even tell a particular one. For inside such stories are some of the most important invisibles humans have ever known. They are stored inside fairy tales for important reasons, among which is the saving of memory for times such as these.

We all know how fairy tales begin: "Once upon a time" they say. And that is an important beginning. For in that moment the dreamer deep inside us awakens to a signal as old as humankind. The dreamer knows immediately that important invisibles are going to be discussed. So a fairy tale might begin with "once upon a time" and then say "in a certain land, in a certain kingdom." And that is the right and true next line for the land that we are traveling to cannot be found in this world.

To make the point even clearer, the storyteller might also say: "On this earth there are five continents, we are now going to the sixth" or "our planet has six oceans, we are now going to the seventh." For the thing about fairy tales is that they happen simultaneously in two worlds, this world and the invisible world that lies underneath and behind this one. And that other

continent, that other ocean is located in the invisible world.

If you are a literalist you will have trouble with this, you will have trouble with this whole talk. You will try to turn it all into a metaphor - but it is not.

For our planet has six oceans—and we are now going to the seventh.

Once upon a time in a certain land, in a certain kingdom there lived a young man and woman who met and fell in love. They were happy as all young people who meet and fall in love are and before long they decided to marry.

The young man's father is a merchant, the young man his assistant. So the prospects for the young couple are good.

And we know when we hear this that the young man will often be away from home, know already that the male will be absent in a particular kind of way, though of course this knowledge is not in our conscious minds. It is something the dreamer inside us understands from signals in the story's beginning.

Well the merchant is happy for his son and he gives the couple on their wedding day a small cottage sitting at the edge of the forest.

Again, some new knowledge comes into the story but this time it percolates upward enough that we feel something different. Such a forest, next to such a cottage, is the place where the ancient deeps of the world and the human world touch. Important things always happen at such places of contact and the dreamer inside us knows it. It is at this point we feel something moving inside us, some important invisible begins to emerge into this world.

So . . .

Once upon a time in a certain land, in a certain kingdom there lived a young man and woman who met and fell in love. They were happy as all young people who meet and fall in love are and before long they decided to marry.

The young man's father is a merchant, the young man his assistant, so

the prospects for the young couple are good. The merchant is happy for his son and he gives the couple on their wedding day a small cottage sitting at the edge of the forest.

The house is surrounded by a small wooden fence but the fence and the gardens and the house itself have all been a bit neglected. So the young couple spend a lot of time making everything beautiful again. They don't have much money but they are happy and they laugh a lot as they create their new life together.

And it comes as no surprise that in a few years they one day find they are to have a child.

There is almost always a child in fairy tales. And the sex of the child doesn't really matter. The child can be female as in Cinderella or male as in the Maiden King. The most important thing is that there is a child. And in this fairy tale it turns out that the child is a girl.

Now the young couple are filled with joy and happiness at the birth of their child and the family is a happy one. And though the father is often absent with his work there is great love given and received between everyone.

From the beginning the young mother takes the girl child with her everywhere. The mother had, over time, turned the land around the house into bountiful gardens in which much of their food was raised. She was also wise in the ways of simples and medicinal plants for she had learned these things from her mother as her mother had learned from hers before her.

And as her mother had done her, the woman began to teach her young daughter about gardens and medicinal plants. And from time to time on very special occasions they would go together into the forest by their home for certain plants that could only be found there.

From the beginning the mother warned the girl not to go too deeply into the forest for there were things in the forest, she said, that were very ancient and powerful and were better left undisturbed. So, on these trips into the forest they would only go in a little way and early on the mother showed the girl the boundaries she should not go beyond.

And of course, at this point in the story, we know that eventually the girl is going to go deeper into the forest, don't we?

Now the mother showed the girl all the plants she knew in the forest, all the ones useful as simples. And she taught her how they should be harvested and used for medicine. There was also one special plant that the mother said the young girl should always look for, for it was very rare and very hard to find. But it was one of the most powerful of medicines and much to be desired. The mother described the plant in detail and she made the young girl promise that if she ever found such a plant she would come and get her immediately.

Now as the young girl grew older she became more adept at the work and the mother allowed her to wander on her own in the forest during their forays to find herbs. And one day as always happens in fairy tales the young girl went just a bit too far into the forest.

As we all knew she would.

It was then, of course, that she found, for the first time, the plant her mother had told her about. And as she had promised she went and found her mother and took her to the place where the plant was growing.

A look passed between them that said everything that needed to be said about the girl going outside the boundaries, but the mother did not scold her. And very carefully she showed her daughter how to harvest the plant.

The little girl dug up the plant and when she had it out of the soil she found to her surprise that the root looked very much like a tiny person. There were arms and legs and a tiny head. And there were eyes even though they were closed. The root was all wrinkled and brown and seemed as ancient as the forest itself.

The mother explained that the root was the most powerful part of the plant but that whenever a young girl found her first of these plants she must keep that root for her very own and she must keep it with her for the rest of her life.

“But what will I do with it?” the little girl asked her mother.

And her mother looked at her with eyes of love and said, “In time you will know my child. For each of us who travel this path finds such a root. In your time of greatest need you will understand, as each of us have before you, its purpose.”

Now it was not long after this that the mother became ill. And no matter what anybody did the mother weakened more and more with each passing month and eventually she died.

The father grieved a long time but as he still had to work he had neighbors and friends help with his daughter when he was gone—and so time passed. But eventually as always happens he fell in love again and one day he brought his new bride home to the little house by the forest.

We know what is going to happen now don't we? Because the stepmother is a very ancient part of fairy tales and the dreamer inside us recognizes her for what she is whenever she shows up. That part of us knows what she portends--trouble is not far away. Trouble always has to come from somewhere in a fairy tale. In this one it comes from the stepmother.

At first the stepmother was kind but slowly she began to change. Soon she insisted that all the gardens around the house be torn out and that the yard be landscaped like those of the rich people in town. She began to insist that she have more expensive dresses for she has no desire to dress in simple clothes. And of course, every day when the father is gone, the little girl is forced to work for the stepmother. She is forced to spend much of her time on her knees, scrubbing the floors of the house and washing the windows and keeping weeds out of the yard.

And every night she cries herself to sleep thinking of her mother, holding tightly to the root she gathered so long ago.

* * * * *

Now one of the difficult things about these kinds of fairy tales, something that has always troubled me, is the blindness of the good father.

It's clear from the story that he loves his little girl yet he brings a cruel stepmother into the house and never seems to notice what is happening. When I was young I never could understand it. If he loves his little girl so much, why doesn't he do something to help her? And the reason why he does not, it turns out, is one of the great teachings of this kind of fairy tale.

Because we live in literal times we have forgotten the teachings of the good father who cannot see. And we have forgotten the teachings of the cruel stepmother. And we have forgotten the teachings of the root that was found in the forest.

That is why these kinds of fairy tales were created. They hold our collective memories of the important teachings of those things. And those are the things I really came to speak about tonight.

Those long ago storytellers who created fairy tales understood that all things possess a shadow side. So they shaped fairy tales to hold those understandings.

When they told a story about a wise king who had a foolish and simple-minded son they were going someplace in particular. It often turned out that when the wise king died and the foolish and simple-minded son became king, there was an evil councilor who shaped the son's rule. And that rule became evil and great harm was done to the people of that land.

What the storytellers are telling us in a tale like that is a story about the shadow side of the masculine. Not the healthy male, not what might be called the patriarchal, but rather the shadow side of the masculine, what might be better termed patriarchalism.

That the simple-minded and foolish son's father was not, in our world, a wise king but merely an average one does not alter the story's relevance for the years of the Bush presidency.

Such stories are meant to teach us about the shadow side of things, and about our responsibility toward them.

The wicked stepmother, of course, is a repeating character in fairy tales. And she is about the shadow side of the feminine, just as the evil councilor is about the shadow side of the masculine.

In such tales the good mother who died is code for the positive side of the feminine, what you might call its healthy expression, something that could best be termed the matriarchal. It is this part of the feminine that most

of us knew in our mother's womb, perhaps the part of our mother that truly was happy to see us the day we were born.

The stepmother is code for the shadow side of the feminine, something that might better be called matriarchalism rather than matriarchal.

In reality what happened is that the mother did not die nor did the father remarry. Slowly over a long period of time the mother changed. The shadow side of the feminine became predominant. And that is one of the great teachings of this kind of tale.

All of us have seen this. All of us have had friends we knew when we were young, when we were teenagers perhaps. Friends who were truly joyful who then, as life progressed, became bitter because of wounds they received. Or who, for some reason, simply forgot who they are and why they are here.

Tales such as these are meant to teach us about exactly that change. They hold our memories of the shadow side, a shadow side that any of us can choose at any time to follow.

And the good father who cannot see ? He makes more sense now doesn't he? The change is slow and the father doesn't want to see what is happening. Or perhaps the change is so slow he just doesn't notice. He truly is a good man but one of the oldest teachings of all is that good men can do evil things simply because they refuse to see what is happening right in front of them. By their blindness and their silence they acquiesce to evil.

Cinderella is a perfect example of this kind of story. The two step-sisters, of course, are not step-sisters but Cinderella's real sisters who have been corrupted by the shadow side of the feminine. In our story the good mother and her child share love and closeness while spending time with plants. The stepmother however is concerned with appearances. How her yard looks and her clothes. She begins to value surface literalisms more than invisibles.

We can always tell the movement of the shadow side when literalisms become more important than invisibles.

Another important code in these kinds of tales is that the girl is forced to clean the house over and over again. And she may be beaten or censored for doing a poor job of it or for tearing her dress.

This kind of cleaning is always about getting rid of the ancient powers of the world. It is about removing Earth from the human realm. It is an

attempt to get rid of the uncertainty that is present in all natural systems, an attempt to control the nonlinearity of nature, to place upon it a static system of behavior in order to provide a kind of predictable security or safety.

And of course Cinderella, like our little girl, spends much of her time cleaning and scrubbing as well.

The struggle that Cinderella goes through is the same one the girl in our story is struggling with. The wholeness of her nature, what you might call the 360 degree personalty that all children have when young, is under assault by the shadow side of the feminine.

The tales don't really tell us why such an assault occurs. But perhaps it is because the mother has lost touch with the healthy child in herself, perhaps after too long a time of not taking care of her own needs. And now that she has lost it in herself she can no longer bear to see it in her child.

These stories are always about the shadow side and its assault on the healthy child. And they are about how the still uncorrupted child deals with that assault.

We know when we hear fairy tales such as this one that wrong things are occurring. We know immediately that what the stepmother is doing is wrong. We know that there is something in the father's blindness that is not right. We know that the child is in danger and we want to help her so that she does not forget who she is.

But when we experience these things in this world, they are much more difficult to see. It is much harder for us to trust our feeling sense and even harder for us to say, "stop" to those who are doing these things.

That is why such tales are necessary. They hold the memories of our ancestors of just these kinds of things. They also offer solutions, if we will listen.

Now in this story I have been telling you, every night the young girl goes to bed and weeps. She cries for the mother who died and for the pain of her daily life and she holds to her breast the root she dug so long ago. She sends to it all her pain and prayers and as often happens in tales such as these, one day something happens.

One day the forest man that the root really is opens his eyes and looks right at the little girl and says, "I have heard you these long nights. And as your mother told you long ago, in your deepest need you would understand

my purpose in your life. I am here to help you.”

And at this the little girl cries and cries and says, “Tell me what to do? I am so unhappy. I want things to be the way they were.”

And the forest man looks deeply into her eyes and says, “You must go into the deep forest and there you will find what you seek.”

Now, of course, we knew something like this was going to happen from the beginning of the story. A journey into the depths of the forest must always take place. The dreamer inside us knew it from the first mention of that forest.

In the story of Cinderella the fairy godmother is an expression of the ancient powers of the world. In our story it is the forest man who was first found in unactivated form as the root of the rare plant.

And as is always true, it is our need that calls on such powers to come alive, to speak to us, and to help us, to help us not become the enemy of our souls or memories.

The little girl, of course, is astonished by the root coming alive and speaking to her. And she is also afraid. Her mother is gone, the forest is old and deep and ancient powers live there that are better left undisturbed. How then can she go into that world by herself. She is too young, too weak, too scared to do so.

Yet the situation in which she finds herself is a terrible one. Like all of us, she finds herself between two very hard things, one brutally painful that will kill her spirit in the end, the other terrifying, one that has an outcome not possible to know.

Now in fairy tales such as these time is not like time in our world. It may be that the young girl will not go into the forest in her lifetime. It may be that it will be her daughter or her granddaughter that will do so.

You might say that after the herbal schools were closed down in this country in the early 1930s it was a very long time before a young girl had the courage to go into the forest. Her name as all of you know is Rosemary Gladstar.

And as time went on more and more of us left our families and went into the forest to find what we were meant to find there, to find the soul truth that can only be found in deep forest.

And time, as time always does in this world, has continued to move on.

We once again find ourselves in the position of the little girl whose mother has died and whose father has remarried. For these stories always repeat themselves over and over again.

That is part of the importance of fairy tales. For they give us clues to the difficult moral choices that face all human beings sometime in their lives. And every new generation will face them just as we once did, just as we will continue to do as long as we live.

Now in many of these stories the greatest trouble comes when the evil councilor and the cruel stepmother make alliance together. In other words when the shadow side of the masculine and the shadow side of the feminine come together in common purpose.

The evil councilor is concerned with the accumulation of power without moral restraint and as well with protection of territory. The stepmother is concerned with safety and predictability, with security.

Long ago in our world such an alliance occurred between the social welfare movements that were composed primarily of women activists and the American Medical Association composed primarily of men. The women's activist groups wanted to outlaw drugs, alcohol, and tobacco in order to protect children from being medicated with opium to keep them quiet, to protect women from being beaten by drunken husbands, to remove the dirty habit of chewing tobacco and spittoons from all public areas and to stop people smoking. And the physicians wanted control over medicine in order to protect their turf. They wanted power over health care.

The drug war began then and the prohibition of alcohol and the dominance of technological medicine and pharmaceuticals, and, too, the illegalization of herbs. And we are still struggling with the side effects of those things.

In that time, as well, the forest was forbidden to most of us; we were taught it was dangerous, that only the superstitious went there. Then in the 1960s children in large numbers went again into the forest. Massage schools, and body work, and midwifery, and unique forms of psychotherapy, and herbalism and a great many other things were found there. A lot of healing for human kind was brought out of that forest from our journey into it. But slowly, one by one, each of those modalities has been taken over by the stepmother, often with the help of the evil councilor. The only area exempt,

until now, has been herbalism.

And now comes something called the Good Manufacturing Practices—the GMP—which we are assured will keep the public safe but which, in actuality, spells the end of community herbalism in this country. We will no longer be able to go into the forest and find the plants there that we need, no longer be able to make them into medicines for the people who come to us.

And the groups behind the GMP? The ones who lobbied for years to get it passed? Well, one of them is the Council for Responsible Nutrition. And we know when we hear that kind of language that men smelling of evil have walked into the room. Who do they represent? Among others, Cargill, Archer Daniels Midland, Bayer, Avon, Dow Chemical, Glaxo Smith Kline, Avon, and Cadbury Schweppes.

AHPA is another group that lobbied for the GMP. Most of the large herbal and tincture companies are members (Frontier, Gaia, HerbPharm, Nature's Way, Vitamin Shoppe, Rainbow Light, Swanson), as are Aveda (owned by Estee Lauder), Tom's of Maine (owned by Colgate-Palmolive), the Mars corporation, Whole Foods Market, and the Hain Celestial Group, Wells Fargo, and (when this was written) Coca-cola (who has apparently dropped their membership since they no longer appear on the AHPA website).

As Michael McGuffin, the head of AHPA said so succinctly, “This is the end of these mom and pop companies making herbal medicines in their kitchens.”

All of us have been, I fear, the good but blind father for far too long.

We have failed to see what is right in front of us, failed to see the movement of the shadow side, not only of the masculine but also the feminine, into our world and our healing work.

The GMP of course will primarily rid the large herbal companies of their smaller competitors, that is its true purpose. Over 160 small herb companies will go out of business next year, many that I have bought from for over 20 years. The safety of the public has never been the issue. Public harm from the smaller herbal companies is nonexistent. Harm from the larger companies, on the other hand, is relatively common. They are the ones that buy herbs in huge quantities from places like China. And those larger companies should indeed be compelled to work under something like the

GMP.

Still, that is the lesser issue. The true issue is the desire for power by certain people and groups, combined with fear of and a desire for control over the wild. It is a fear of the wild and a fear of the people who go into the forest and make their medicines from what they find there that is at the root of this.

We herbalists are nearly the last bastion of the wild and the belief is that we must be controlled. Not so much so that the public may be safe but that the rational system of control itself may be.

The movements that began in the 1960s had at their root two common beliefs. One was that a return to the wild was essential and the other was a trust in the individual. And both these things were closely intertwined. In herbalists both have taken root and flowered.

Since the 1960s however, trust in the individual lessens with every year. And for sure the belief that the wild will kill us is strong and more strongly asserted every day.

Most people believe that the individual cannot be trusted and this is as true on the left as on the right. A very liberal activist where I live told me that it was okay for me to do the wiring on my home but that it was not okay for others to do so on theirs. I was intelligent and could be trusted but most people were not intelligent and thus could not be trusted to think and do for themselves. There had to be laws to protect them from themselves, and us from them.

Regrettably this belief is all too common now. It is one of the primary reasons that herbalists cannot be trusted to make their own medicines.

In our time, our government and much of our culture no longer trusts the only thing that matters in a functioning democracy—the people themselves. We are indeed in dark times.

Deep inside most of us is the awareness that we live in difficult times. All of us know that the ecosystems of the earth are moving into wilder and wilder gyrations in an attempt to restore balance. All of us know that human beings have exceeded the carrying capacity of the earth and that payment for that excess is coming due. And most of us know something is wrong deep inside our culture and our government.

Most of us sense that many groups are attempting to place controls over

more and more aspects of our lives, not to help us, but because they are afraid of a population uncontrolled, because they are afraid of those who go into the forest, because they are afraid of a forest that is and will always be beyond their control.

And if there is one question I am asked over and over again, it is that in knowing these things, how do I go on with hope.

I go on with hope because I have been in the deep forest and I have found what dwells there.

I have found that whenever a human being needs an herb it begins to grow in proximity to them.

I have found that as lyme disease moves into new regions the primary herb helpful for it, Japanese knotweed, begins to grow there as well.

I have found that just as bacteria began to develop resistance to pharmaceuticals herbalists in their thousands began to train in a profession they could not legally practice simply because they felt they should.

And I have found that when plants take psychotropics they have visionary experiences just like we do. And they use what they find in such experiences to innovate, to generate solutions to complex ecosystem challenges that lie outside their normal frame of reference. This is one of the major sources of symbiogenetic, chemical, and ecofunction innovation in Gaian ecosystems. It is a primary purpose of psychotropic plants in ecosystems to generate nonlinear innovations in the ecological function of any species that ingests them. And all species do ingest them—they are meant to.

So it is not so odd to have found that the majority of the people involved in the herbal renaissance themselves took a lot of psychotropics in the 60s and that those psychotropics led directly to the emergence of herbalism in this country.

There is much more going on here than we have been taught. As Thoreau said, “You must understand that nothing is what you have taken it to be.”

I believe in the individual. I believe in the Earth. And I trust the invisibles that I see all around me.

We live in dangerous times, times of great change. There is no way to avoid that truth. It becomes more apparent each day of our lives that the lives

that our children will live will not be anything like our own. And all of us know it.

The tendency, of course, is to look outside ourselves, to find someone who has the answers, to a government or new president who will institute changes so that things will go back to normal, so that we can continue as we have been.

That is a tendency that we must avoid.

I believe it is incumbent on us to give up being the good but blind father and begin to see what is in front of us. We must, in whatever unique form we choose, begin to address the problems of both the evil councilor and the cruel stepmother. To do so, we must trust our own hearts and see what is right in front of us.

Buckminster fuller addressed exactly this problem when he said:

1) It is my driving conviction that all of humanity is in peril of extinction if each one of us does not dare, now and henceforth, always to tell only the truth, and all the truth, and to do so promptly—right now.

2) I am convinced that humanity's fitness for continuance in the cosmic scheme no longer depends on the validity of political, religious, economic, or social organizations, which altogether heretofore have been assumed to represent the many.

3) Because, contrary to that, I am convinced that human continuance now depends entirely upon:

A. The intuitive wisdom of each and every individual.

B. The individual's comprehensive informedness.

C. The individual's integrity of speaking and acting only on the individual's own within self-intuited and reasoned initiative.

D. The individual's joining action with others, as motivated only by the individually conceived consequences of doing so.

E. The individual's never joining action with others, as motivated only by crowd-engendered emotionalism, or by a sense of the crowd's power to overwhelm, or in fear of holding to the course indicated by one's own intellectual convictions.

Bucky understood that only *you* know what it is that you should do in response to the challenges of our times. And he understood that Gaia speaks through the work that each of you is given, that deep inside you some part of

you knows just what it is that you should be doing. And he understood that that thing in you, telling you what to do, is an expression of Gaia, speaking through the movements of your life. And that only if you trust that thing can the solutions to the challenges that face us be successfully met.

The poet William Stafford also spoke of these things. But rather than to the mind, as Bucky did, he spoke more as fairy tales do, to the dreamer that lives deep inside us. He spoke directly of the good father who just goes along without noticing what is happening. And he spoke of the damage that the stepmother can do if she continues to act unchecked. And he does so in perhaps one of the most powerful poems ever written in the English language

*If you don't know what kind of person I am
and I don't know what kind of person you are
a pattern that others made may prevail in the world
and following the wrong god home we may miss our star*

*for there is many a small betrayal in the mind,
a shrug that lets the fragile sequence break
sending with shouts the horrible errors of childhood
storming out to play through the broken dike
And as elephants parade holding each elephant's tail
but if one wanders, the circus won't find the park,
I call it cruel and maybe the root of all cruelty
to know what occurs but not recognize the fact.*

*And so I appeal to a voice, to something shadowy,
a remote important region in all who talk:
though we could fool each other, we should consider -
lest the parade of our mutual life get lost in the dark.*

*For it is important that awake people be awake,
or a breaking line may discourage them back to sleep
the signals we give - yes or no, or maybe -
should be clear; the darkness around us is deep.*

Travel well, my people, travel well. Remember who you wanted to be. And don't let anything stop you from going back into that forest. For it is in your journey to that forest and in what you find there that all our hope resides.

Updated Comments:

1) A number of people have said that I was too hard on Michael McGuffin. Well, no, I wasn't. He makes his living as the head of a special interest group; he represents their interests and those companies, as a result (in part) of his efforts, now have up to 160 fewer competitors to deal with.

2) A number of people, such as Paul Bergner of *Medical Herbalism*, have said that the picture is not as grim as I have portrayed it; that community herbalists will still be able to make medicines for their clients.

Well, the picture is as bad as I have presented it. When corporate interests such as the CRN and AHPA get this involved in government regulation small companies, "mom and pop" companies are in trouble. That is always true. The multinationals that make billions of dollars *and* the larger herb companies that make millions (and it matters not that we used to hang with their founders in the good old days) have no interest in those smaller companies futures. The small companies are merely historical footnotes that have not yet left the field and as usual, the customers will be the poorer for it. Large corporations care about their scatological bottom line, not "the people."

As to whether or not herbalists can still make medicines. Well, yes, they can, sort of. The FDA has issued a statement insisting that all herbalists come under the GMP regulations and that all of them must abide by those regulations. However, due to the numbers of those herbalists, enforcement is too difficult. So the FDA is not going to initiate enforcement. However, if a complaint is lodged, yeah, they will enforce. So, if you stay under the radar, you are fine. For now.

If you look at who is for the GMP you will find that most if not all of them have ties to interests that will be furthered by the GMP. They have something to gain by their support of it.

3) Technically, it is now illegal for organizations such as the International Herb Symposium to allow manufacturers that are not compliant

with the GMP to sell products at their conferences. This includes the AHG and all the Health Expos, East and West. It will be interesting to see how that plays out. Will the organizers of those conferences enforce the law and tell people they have known for decades they are no longer welcome to sell their products there? Yeah, sooner or later, they will. With apologies, of course.

4) I am indebted to Robert Bly and his take on *The Maiden King* fairy tale for some of the underpinnings of this material.