‘Uncertain clarity’: contradiction, meaning, and hope

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I can identify three principle sources for the ideas that I want to explore: the poems of Zbigniew Herbert, Michael Frayn’s play ‘Copenhagen’, and, beyond both of these, all the thousands of stories my patients have told me over the past 20 years and more.

My title, ‘uncertain clarity’, comes from a poem by Herbert, Poland’s great post-war poet who died in August 1998 at the age of 73. His poems were written in stubborn resistance to the political intolerance that surrounded him, and this one in particular reveals what his translators, John and Bogdana Carpenter, describe as his:

… desire to look closely and intently at the world, at ordinary objects or feelings, stripped of any bias.

The poem is called ‘Mr Cogito and the Imagination’. Mr Cogito is the protagonist of many of the poems and seems to be Herbert’s alter ego. These are the lines most relevant to my purpose:

Mr Cogito never trusted tricks of the imagination …

he adored tautologies explanations …

that a bird is a bird slavery means slavery a knife is a knife death remains death …

he used his imagination for entirely different purposes he wanted to make it an instrument of compassion

… desire to look closely and intently at the world, at ordinary objects or feelings, stripped of any bias.

This commitment to uncertain clarity is fundamental to general practice: the responsibility to know what we do not know, to be clear about our uncertainty. The great gift of what we do is that every day, if we allow ourselves not only to listen but to hear, we are brought face to face with what we do not know, with the limits of the understanding and power of biomedical science. Herbert requires us not to delude ourselves about the nature of the reality we inhabit and witness. Seamus Heaney describes Herbert’s:

unblindable stare at the facts of pain, the recurrence of injustice and catastrophe.

In another poem, Herbert takes the ancient story of Procrustes and, by naming the victim as a patient, creates a metaphor which seems to implicate medicine alongside politics in his condemnation of totalitarianism:

I invented a bed with the measurements of a perfect man I compared the travellers I caught with this bed it was hard to avoid — I admit — stretching limbs cutting legs the patients died but the more there were who perished the more I was certain my research was right the goal was noble progress demands victims

When poets create metaphors such as this, doctors should perhaps listen. He seems to argue that a commitment to the uniqueness and aspirations of the individual is an essential defence against the tendency to totalitarianism in science, just as much as in politics. He requires us to see our limitations with an ‘unblindable’ clarity.

Michael Frayn’s play ‘Copenhagen’ opened in London in May 1998. It has three protagonists: Niels Bohr, Bohr’s wife Margrethe, and Werner Heisenberg. Between 1924 and 1927 in Copenhagen, Bohr, a Dane, and Heisenberg, a German, revolutionized atomic physics, and indeed the whole foundation of science, with the Copenhagen Interpretation that incorporated the twin principles of uncertainty and complementarity. In the play these principles are summarized by Bohr:

Bohr … Particles are things complete in themselves. Waves are disturbances in something else … They’re either one thing or the other. They can’t be both. We have to choose one way of seeing them or the other. But as soon as we do we can’t know everything about them.
And their implications are explained by both physicists:

**Heisenberg** ... The theoretical point remains, though, that you have no absolutely determinate situation in the world, which among other things lays waste to the idea of causality, the whole foundation of science — because if you don’t know how things are today you certainly can’t know how they’re going to be tomorrow —

**Bohr** ... It starts with Einstein. He shows that measurement — measurement, on which the whole possibility of science depends — measurement is not an impersonal event that occurs with impartial universality. Its a human act, carried out from a specific point of view in time and space, from the one particular viewpoint of a possible observer. Then, here in Copenhagen in those three years in the mid-twenties we discover that there is no precisely determinable objective universe. That the universe exists only as a series of approximations. Only within the limits determined by our relationship with it. Only through the understanding lodged inside the human head.

This revolutionary view of the wave and the particle can perhaps help us to understand more of the many dualisms that underpin our work in general practice.

**Contradiction**

In the ‘Copenhagen’ programme, Michael Frayn quotes Niels Bohr as saying:

*We shall never understand anything until we have found some contradictions.*

So I want to argue that we should stop torturing ourselves with conflicting dichotomies but revel in the enhanced understanding they can give us. Ralph Waldo Emerson wrote:

*An inevitable dualism bisects nature, so that each thing is a half, and suggests another thing to make it whole; as, spirit, matter; man, woman; odd, even; subjective, objective; in, out; motion, rest; yea, nay.*

My list is almost completely different, but the point is the same: wave/particle; general/particular; individual/population; subject/object; moral autonomy/physical heteronomy; experience/language; myth/novel; frequentist/Bayesian.

We need both ends of each polarity, and, like Bohr and Heisenberg, or Herbert’s pendulum, we must strive to oscillate between each conflicting perspective. Isaiah Berlin’s life’s work was to argue the same truth — that there can be no Utopia, because all Utopias require all people to share the same aspirations, while individuals tend to yearn for different and potentially conflicting goods. The task for us all is to find ways of holding these pairs of incompatible goods in a constructive tension.

*The notion of the perfect whole, the ultimate solution, in which all good things coexist, seems to me to be not merely unattainable — that is a truism — but conceptually incoherent: I do not know what is meant by a harmony of this kind. Some among the Great Goods cannot live together. That is a conceptual truth. We are doomed to choose, and every choice may entail an irreparable loss.*

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*Amedeo Modigliani (1884-1920) Portrait of Dedie (dedicated to Odette Hayden), 1918. Copyright Musée d’Art Moderne, Paris France/Bridgeman Art Library.*

**General/particular**

Every particular individual is unique and huge and infinitely fascinating. Yet the great achievement of the birth of modern science at the time of the Enlightenment was to begin to see beyond the individual; to shift the focus from the particular to the general. Biomedical science is based on the relatively crude generalizations that we recognize as diseases. If we group people together according to these disease categories, we can extend our knowledge about the phenomenon they have in common — be it diabetes or epilepsy. As a direct result there has been enormous progress in clinical medicine, but the process of generalization remains dangerous.

The categorization of people devalues individual experience and can leave individuals feeling unrecognized and the reality of their symptoms unheard. It is a means of making judgements about people that are both constructive and destructive. The general practitioner, while actively using the generalizations of biomedical science, has a constant responsibility to re-focus on the individual, the detail of their experience and the meaning they attach to that experience. This is the same oscillating view that Bohr describes between the wave and the particle. We cannot see the particular patient and the generalization simultaneously. At any given instant, we have to choose one way of seeing or the other. If we are to maximize our understanding, if we are not to become stranded and impotent at one pole of the dualism, we must learn to oscillate our gaze.
In his brilliant essay, ‘Modigliani’s Alphabet of Love’, John Berger describes how the outline of the skin in Modigliani’s paintings becomes the frontier between the finite and the infinite, the particular and the universal.

That meeting, that recurring rendezvous, only takes place, so far as we know, within the human mind and heart. And it is both complex and very simple. A loved one is finite. The feelings provoked are infinite. ... The loved one is also singular, distinct, separate. The more closely one defines, ... the more intimately one loves. The finite outline is proof of its opposite, the infinity of emotion provoked by what the outline contains.

And so the general, the universal, and the infinite is juxtaposed to the particular in art just as it is in science, but perhaps with more grace and subtlety. It is the particular and the detail that are essential to identity, recognition, and intimacy:

Details are wonderful. They are informative, they are calming, and they penetrate the anxiety of isolation: the patient feels that, once you have the details, you have entered his life.

Individual/population

In any collectively funded health care service, doctors must find a way of balancing the needs of sick individuals with the needs of others, and with the resources of the wider population. With the creation of Primary Care Groups, we as general practitioners will be forced to confront this imperative with an immediacy and there is great danger in turning a human being into an object.

Illness belongs to individual patients; disease belongs to science. The former is subjective; the latter, objective. Medicine is unique in aspiring to be a science whose object is also a subject, otherwise the gap between doctors and patients is inexpressible.

The problem with one’s own child is, precisely, the inability to oscillate between the subjective and the objective, medicine is powerless:

The first diagnostic step rests on intersubjectivity, and the second on a striving for objectivity.

The underlying assumption that human nature is basically the same at all times, everywhere, and obeys eternal laws beyond human control, is a conception that only a handful of bold thinkers have dared to question. Yet to accept it in the name of science is, in effect, to ignore and downplay man’s role as creator and destroyer of values, of entire forms of life, of man as a subject, ... the character of men as self-transforming beings, able to choose freely, within the limits imposed by nature and history, between rival, mutually incompatible ends.

It also ignores the lessons of the Copenhagen Interpretation that scientific ‘objective’ facts are socially constructed. Accepted in the name of medicine, the assumption ignores the uncertainty that is inherent in ‘objective’ accounts of disease, and underpins the common and dangerous delusion that ‘objective’ facts are true in a way that subjective experience is not. I am arguing the reverse; that, within medicine, the patient’s subjective story provides us with the fundamental truth on which we build our objective framework.

We cannot begin to understand the patient’s story unless we seek to identify and empathize with their subjective experience. To do this, we must come close enough to recognize the detail and the particularity of the individual as the subject of his or her story. And yet, any doctor who has watched over illness in one they love — love with that force which means that there is always a shadow of fear lurking within the joy — knows the value of being able, if only for a moment, to see the patient as an object. Many of us recognize the feeling of being completely unable to tell whether our own child’s fever is just a cold or a sign of imminent death; and the relief of being able to ask the advice of someone who can manage the extraordinary feat of seeing our precious child as an object.

Without the ability to oscillate between the subjective and the objective, medicine is powerless:

The first diagnostic step rests on intersubjectivity, and the second on a striving for objectivity.20

The problem with one’s own child is, precisely, the inability to oscillate between the two perspectives because one is so emotionally tied. Indeed, one of the tests of the ability to act appropriately on the patient’s behalf is the ability to maintain a constructive tension between the two poles of the dualism.

The patient tells us the story of their illness and this is the closest we can get to the reality of the human experience of illness; we must then summon our knowledge of biomedical science, which by its very nature turns the patient into a standardized human object, and make a judgement as to whether the patient’s illness fits into a useful model of disease. Such a model may offer effective treatment, or even cure, but if illness persists and becomes chronic, the doctor’s gaze must once again focus on the patient’s subjective experience, otherwise the gap between doctor and patient becomes unbridgeable.21

Moral autonomy/physical heteronomy

Kant insists over and over again that what distinguishes man is his moral autonomy as against his physical heteronomy — for his body is governed by natural laws, not issuing from his own inner self.22

The subjective and the objective play out within the body of every one of us. The first symptoms of illness make us acutely aware that the body, although simultaneously embodying our subjective self, is a frail, decaying, and frequently dysfunctional...
object over which we feel ourselves to have no control.

*I am responsible for it, yet at its disposal, and at the same
time it expresses and embodies me. My body is at once the
most intimate yet alien presence.*

And yet, coping with illness as patients or treating it as doc-
tors, we should never lose sight of the human capacity for moral
autonomy. Again, Frayn touches on this in ‘Copenhagen’:

**Heisenberg** … And off he goes into orbit again. Incidentally exemplifying another application of comple-
mentarity. Exactly where you go as you ramble around is of
course completely determined by your genes and your
upbringing and the earth’s magnetic field and the gravita-
tional pull of the moon. But it’s also completely determined
by your own entirely inscrutable whims from one moment
to the next. So we can’t completely understand your behav-
ior without seeing it both ways at once, and that’s impossi-
ble, because the two ways are mutually incompatible.

For too long we have viewed the body as a passive machine,
and we are only just beginning to glimpse the power of the
human will to resist illness and disease. To give one example, we
are slowly beginning to understand how poverty, by producing a
sense of low level of control, insecurity and loss of self-esteem,
creates chronic psychosocial stress and, through associated phys-
iological changes, comes to be transformed into disease. The
evidence from studies of non-human primates suggests that the
psychosocial stress associated with low social status produces
physiological change, including higher blood pressure, hyper-
secretion of cortisol, suppressed immune function, central obe-
sity, and adverse serum lipid ratios. We know that in humans, a
sense of having little control of the work environment is associat-
ed with an increased risk of future coronary heart disease. The
implication is that a greater sense of social control, allowing a
freer rein for individual moral autonomy, promotes health and
prevents illness and disease.

Pellegrino describes healing as:

— to restore wholeness or, if this is not possible, to assist in
striking some new balance between what the body imposes and
the self aspires to.

Again, the argument is that in medicine we must achieve a bal-
ance and a constantly oscillating view between the heteronomy
of the body and the autonomy of the self.

**Experience/language**

In a letter in November 1994, Carl Edvard Rudebeck wrote:

*Thinking is basically limitation within a reality that has no
limits. This implies not only a captivity within language but
also a freedom of choice.*

This liberating statement seems to imply, but perhaps confuse,
two different filtering processes. Subjective experience and the
feelings it invokes are free-floating and infinite, yet completely
unique to the individual; concretized into thoughts, feelings
begin to be both structured and restricted. The next step by which
thoughts are further concretized into language imposes another
layer of structure and restriction.

**Bohr** He stands on the doorstep blinking in the sudden
flood of light from the house. Until this instant his thoughts
have been everywhere and nowhere, like unobserved parti-
cles, through all the slits in the diffusion gratings simultane-
ously. Now they have to be observed and specified.

But experience, feelings, and thoughts are necessarily lonely;
only when expressed in language can they be shared. And
because they are shared, words represent what is universal in
human experience:

— it is the oral and, very much later, the written word
which empower the human imagination to narrate, to com-
mitt to remembrance, to vary on the sagas, the tales, the
myths which are the alphabet of our culture.

The words our patients speak are the closest we can come to
the human experience of illness. They represent only a shadow
of the totality of that experience, but they express the most that
we are able, through language, to share. Illness symptoms are
experienced as feelings; in order to be presented to the doctor,
those feelings must become words. William Carlos Williams,
himself both a family doctor and a poet, acknowledged his
patients’ struggle to give expression to the profound feelings
evoked by the experience of illness.

We begin to see that the underlying meaning of all they
want to tell us and have always failed to communicate is the
poem, the poem which their lives are being lived to
realise.

**Myth/novel**

While Bohr and Heisenberg were wrestling with waves and parti-
cles, uncertainty and complementarity, the Russian philosopher
Mikhail Bakhtin, ten years younger than Bohr and six years older
than Heisenberg, was writing about language. His basic thesis
seems to me to be that the novel is to myth or poetry as illness is to
disease, although, of course, because he was not at all interested in
either illness or disease, he did not quite put it like that. However,
his work is profoundly relevant to doctors listening to patients. He
argues that the novel has a breadth and an open-endedness which,
by it very nature, resists limitation and categorization. In contrast,
both myth and poetry are more focused, more unitary and more
formal. All these literary forms achieve a kind of universality,
the novel by giving space to every variety of human voice, myth
and poetry by expressing what is common to those voices.

The quality in the novel which assures its open-endedness is
what Bakhtin calls ‘dialogic imagination’ — the attention paid to
accommodating a huge diversity of human voices, allowing the
expression of a vast plurality of experience. These voices are not
heard in isolation but always in dialogue — words are always
formed with another in mind, if only one’s own inner self. Words
are changed and refracted by each usage — continously subject
to both centripetal and centrifugal forces. As each one of us
appropriates words for our own purposes, we add our own partic-
ular shade of meaning, producing a centrifugal force which con-
tinually develops and fragments language; yet, at the same time,
all language is social and built on the attempt to achieve shared
and centripetal understanding. Language is inseparable from dia-
logue. This draws attention to both the speaker and the listener,
and the obligation of the listener to respond.

— language, for the individual consciousness, lies on the
borderline between oneself and the other.

Bakhtin argues that the scope and precision of dialogue within
the novel constantly challenges any notion of absolute truth but
has the capacity to maximize our understanding of human experience.

_Fewer and fewer neutral, hard elements (‘rock bottom truths’) remain that are not drawn into dialogue. Dialogue moves into the deepest molecular and, ultimately, subatomic levels._

Back to the wave and the particle! The space and richness of the novel resist the tendency of language to become unitary and normative. In the same way, the stories of our patients resist the unitary and normative language of medicine. Dialogue challenges all aspirations to a monopoly of truth.

—it is important to note the difference between interrogation and dialogue. Questions which admit of only ‘yes’ or ‘no’ answers do not allow the respondent to provide a description of his or her experience. ... If the physician is to learn something about the patient’s experience he or she must initiate a dialogue with the patient — a dialogue that allows the patient to provide a first person narrative of the illness.

One possible difference between interrogation and dialogue is that, in interrogation, the interrogator frames questions entirely within the context of his or her own worldview; whereas, in engaging in a genuine dialogue, the listener attempts, through imagination, to move into the contextual horizon of the other’s world.

Chekhov wrote that the responsibility of the writer is not to seek to answer questions but to make sure that they are formulated correctly, and Milan Kundera in _The Unbearable Lightness of Being_ points out that:

_Only the most naïve of questions are truly serious. They are the questions with no answers. A question with no answer is a barrier that cannot be breached. In other words, it is questions with no answers that set the limits of human possibilities, describe the boundaries of human existence._

Through dialogue, we explore the limits of our understanding, both in the novel and in the consultation.

**Frequentist/Bayesian**

There is the potential for another useful dualism within the statistics which underpin much of the science we seek to apply in daily practice. However, currently, this dualism is weighted so heavily towards the frequentist pole that there is, as yet, little possibility of holding these two in the kind of constructive tension that I have been advocating.

_Bayesian interpretation of trial results is not dependent on a starting hypothesis, but rather on ‘prior’ expectations of treatment effects ... Thus Bayesian approaches incorporate beliefs resulting from evidence external to the trial in a formal way._

Frequentist statistics assume the notion of absolute truth; Bayesian statistics allow the possibility that different human values will create different truths; that is to say, that different observers will see different things — back once again to the wave and the particle!

**Meaning**

Writing about poetry, Seamus Heaney describes ‘the way consciousness can be alive to two different and contradictory dimensions of reality and still find a way of negotiating between them’. I have been trying to explore our responsibility to negotiate constantly between these contradictory dimensions. Most of the contradictions I have discussed are as relevant to art as to science, and both poles of this central, but increasingly illusory, dualism hold in common the need to accommodate contradiction and differing dimensions of meaning.

The endeavours of both art and science are attempts to understand and find meaning in nature, and in human experience of the world around us. If we dismiss or diminish the importance of either pole of the dualism, we reduce our possibilities of understanding. In a letter, drafted but never sent to a fellow writer, Chekhov wrote:

_‘I remember having read two or three years ago some story by a French author who describes a minister’s daughter and gives, unsuspectingly, a clinically accurate picture of hysteria. I thought then that the sensitivity of the artist may equal the knowledge of the scientist. Both have the same object, nature, and perhaps in time it will be possible for them to link together in a great and marvellous force which is at present hard to imagine.’_

What we lack is an effective intellectual framework with which to harness this force; although, perhaps, the philosophical implications of the Copenhagen interpretation offer us a foundation for this.

Meaning, like art, is an imaginative construction. It is built by processes which take the events of a life and mould them into a coherent narrative. The challenge is to find meaning which acknowledges the uniqueness of each individual story, yet also acknowledges the universality of human experience so the individual feels less alone. André Gide wrote:

_There is no psychological truth unless it be particular; but on the other hand there is no art unless it be general. The whole problem lies in just that — how to express the general by the particular — how to make the particular express the general._

In the construction of the meaning of illness, disease, and suffering in the life of a patient, dialogue between patient and doctor can be an agent of change. But to be effective, dialogue must be built on the active use of imagination and memory.

_What the patient seeks is not simply a scientific explanation of the physical symptoms, but also some measure of understanding of the personal impact of the experience of lived body disruption._

The doctor must be able to use their imagination empathically and thereby enter the patient’s world. Whenever we listen, we choose what we will hear, and in that choice we communicate the relative value we attach to what we choose to hear and what we choose to ignore. Almost always, when I get stuck with a patient, when we begin to seem as if we are going round and round in circles, it turns out to be due to a failure of my imagination. The solution comes in seeing more detail, however small, of the reality of the patient’s life. Each detail triggers new scope for the imagination, a renewed possibility of empathy and a much increased chance of the patient feeling heard.

Isaiah Berlin credits the eighteenth century Neapolitan philosopher, Giambatista Vico, with the first description of a way of knowing which is fundamental to all humanistic studies:
the sense in which I know what it is to be poor, to fight for a cause, to belong to a nation, to join or abandon a church or a party, to feel nostalgia, terror, the omnipresence of a god, to understand a gesture, a work of art, a joke, a man’s character, that one is transformed or lying to oneself. How does one know these things? In the first place, no doubt, by personal experience; in the second place because the experience of others is sufficiently woven into one’s own to be seized quasi-directly as part of constant intimate communication; and in the third place by the working (sometimes by a conscious effort) of the imagination.38

Doctors listening and talking to patients use just this sort of knowing; but, perhaps, without fully understanding its importance and its power. It is a knowing founded on imagination and memory. Imagination allows the individual potentially limitless access to the breadth and depth of human experience; memory (wonderfully described by Nabokov as ‘that long-drawn sunset shadow of one’s personal truth’39) roots understanding within the dimensions of an individual life.

Like the novel, understanding and meaning are always opened, always capable of change. Oscillating once again between art and science, and bringing much of my argument full circle, John Berger, in his essay on ‘The Moment of Cubism’,40 quotes Werner Heisenberg:

One may say that the human ability to understand may be in a certain sense unlimited. But the existing scientific concepts cover always only a very limited part of reality, and the other part that has not yet been understood is infinite. Whenever we proceed from the known to the unknown we may hope to understand, but we may have to learn at the same time a new meaning of the word understanding.41

which brings me back to Herbert’s ‘uncertain clarity’, and our responsibility to recognize the limits and limitations of our knowledge.

Hope

Hope is a driving force of both science and art — both seek a vision of how things might be better. Seamus Heaney writes that what he calls the:

— redressing effect of poetry comes from its being a glimpsed alternative, a revelation of potential that is denied or constantly threatened by circumstances.34

Doctors have a similar responsibility to locate hope through the glimpsing of an alternative. Despite the need to strive for empathic and imaginative understanding, doctors and patients necessarily have different perspectives. The education of doctors gives them knowledge of how the health of individuals and populations could be improved. This gives doctors a responsibility to retain a vision of how the health of each patient could be improved.42 Depending on the particular circumstances, this vision could include social, psychological, physical, economic, nutritional, and environmental elements. The vision should never be imposed but can, through dialogue, be made available to the patient so that they have a share in the knowledge of how their health could be improved and can make informed choices.33

General practitioners and patients often see each other regularly over an extended period of years. In such circumstances, it is all too easy to become locked into a static relationship.44 The active seeking of a vision of how things might be better, often against all the odds, can help to prevent this damaging ossification.

But hope can easily become delusion, which brings me to my final dualism and the need to hold hope and scepticism in constructive balance.

Hope/scepticism

Hope in medicine has become gradually disfigured into a delusion of immortality. The logical extension of the curative and technological agenda of contemporary biomedicine is that every death should be viewed as a failure of medical science rather than a defining part of life. This puts an intolerable pressure on both doctors and patients. We now indulge in the pursuit of the Utopian body rather than the Utopian society, and this new focus makes the process no less cruel to the non-conforming individual.45 ‘Progress demands victims.’ Doctors collude by promising rewards for behavioural conformity. Medical science has valued the simple statistics of longevity above any measure of the quality of life. Many of our patients’ palpable lack of enthusiasm for the ‘lifestyle advice’ we are obliged to deliver tells a different story, but the reordering of priorities is nonetheless both insidious and pernicious. As Petz Skrabanek argued, society should have an obligation to alleviate poverty simply because living in deprived circumstances is miserable and demeaning.46 And yet the previous government actively created poverty, and it was only when painstaking and invaluable research established that poor people live shorter lives that the pressure for some sort of redress gained sufficient power. People in developed countries, and especially the affluent, enjoy unprecedented health and longevity, and yet people are more fearful about their health than ever before.

Only an honest scepticism within medicine can begin to redress this balance.47 We need to learn to be much more rigorous in our research and in our critique of that research. If medicine has begun to believe its own propaganda, what hope is there for society? Much more work needs to be done to analyse and describe the limitations of biomedical science, the importance of death, and the overwhelming need to incorporate the patient’s own values and aspirations into a system of care which is increasingly driven by standardized protocols. We must recognize the tendency for medical science to become totalitarian. Marcuse reminds us that:

‘Totalitarian’ is not only a terrorist political coordination of society, but also a non-terroristic economic-technical coordination which operates through the manipulation of needs by vested interests.48

As doctors we need Zbigniew Herbert’s ‘uncertain clarity’ perhaps as never before.

Thirty years ago, John Horder gave the second William Pickles Lecture.49 He reminded his audience that Pickles himself would often start his lectures with the words:

I come to speak about very simple things, everyday happenings and elementary deductions drawn from them ...

I have tried to follow this direction but I have discovered that, although waves and particles appear simple, they are also both uncertain and complex. But uncertainty, contradiction, and complexity are the stuff of general practice and the measure of much of its fascination for us.

References
