

IMAGINE

Imagine is a gift to you in loving memory of our founder George M. Prince, who fired the imaginations of the thousands whom he recruited into Synecticsworld and into his life. A pioneer and a towering figure in the world of creative and innovative problem solving, George's light shines brightly still through the pages of this small book. We hope you will treasure your copy of Imagine and take its messages to heart. It would please George to know that his dream to "...change the way people relate..." lives on.

# Imagination is more important than knowledge

Albert Finstein



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### Innovation is the central issue in economic prosperity.

Michael Porter Harvard Business School

Everything that can be invented has been invented.

Charles H. Duell Director of US Patent Office 1899







#### Some thoughts from Synecticsworld®

This small book contains some big ideas. We hope it intrigues and amuses you—and focuses your attention on the elusive but increasingly crucial subject of innovation. ¶ Synecticsworld® is a world leader in the management of innovation and change. We are an international firm, serving leading companies around the world. In the United States alone, we have worked with some 40% of the Fortune 500. ¶ If our name is unfamiliar, it's because we regard our clients, not ourselves, as the real stars. This fact tells you something important about Synecticsworld®. I Unlike most consultancies, we don't spend months asking you to educate us in your business. And we don't write lengthy reports telling you exactly what to do. Instead, we work from day one to help you and your people design their own futures. Our role is that of a guide, helping fellow travelers to negotiate their way through the unfamiliar but exciting territory of innovative thinking. I Journeys through the creative process can take you to many different destinations. To new strategies and new products. To new ways of working and managing. Ultimately, it can lead to the re-invention of your entire organization.

### If you don't create change, change will create you.



Standing still
is the fastest way
of moving backwards
in a rapidly
changing world.



#### **Pioneers of the Innovation Process**

Synecticsworld® is now the name of the pioneering company originally known as Synectics, Inc., itself a spin off in 1960 from the Arthur D. Little Invention Design Group. Our founders, George Prince and Bill Gordon, became curious about why on some days they invented well and on others not so well. They studied and recorded thousands of hours of innovation sessions asking themselves the question "what is really going on between the people in the group to help them create and implement successfully?" The answers to these questions became the internationally famous Synecticsworld® Creative-Problem-Solving Methodology and spawned a rich Body of Knowledge about how human beings work collaboratively to invent and innovate. ¶ Over the years our research on innovation and the human factors that are its critical components have continued, recently focusing on two key areas: Insight-led Innovation, which is based on discovering hidden customer/ consumer needs and systemic innovation, which looks broadly at the total culture, behavior, and processes that contribute to broadly successful innovative organizations.



Imagination is the highest kite one can

Lauren Bacall



The ability to learn faster than the competition is often the only sustainable competitive advantage a company can have.

Arie de Geus

In the long history of humankind (and animalkind, too) those who learned to collaborate and improvise most effectively have prevailed.

**Charles Darwin** 

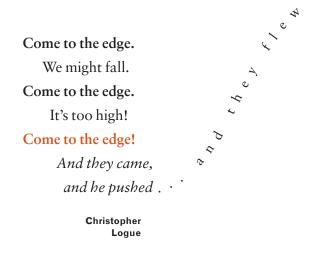
Just as energy is the basis of life itself, and ideas the source of innovation, so is innovation the vital spark of all human change, improvement and progress.

Theodore Levitt

There is no such thing as a failed experiment, only experiments with unexpected outcomes.

**Buckminster Fuller** 





Innovation is Creativity that Ships
Steve Jobs



Instead of pouring knowledge into people's heads, we need to help them grind a new set of eyeglasses so that we can see the world in a new way.

J. S. Brown

And the trouble is, if you don't risk anything, you risk even more.

Erica Jong







#### Turning an accident into a process

Have you ever wondered why some meetings ignite, blast off and lead to valuable new ideas while others go around in circles? ¶ Answering that question—and turning the answers into a practical methodology—has been an obsession at Synectics world® for over 50 years. ¶ Synectics world® began as a spin-off of the Arthur D. Little Invention Design Group. The group would shut itself away for days, straining to make that Eureka moment arrive as it searched for new products and ideas. The people in the group noticed that on some days they invented well and not so well on others. Being curious, they started to examine the group's own creative process. Over the years, they taped thousands of meetings and went over them in detail, asking these questions: ¶ What's really going on between the people in the meeting? ¶ Is what they're doing helping them to be more (or less) innovative in their thinking? I What can be changed to increase the likelihood of success? I We've continued to be curious about how teams perform when they are at their most effective at innovating and sharing commitment to their ideas. We still carry out research and are continually building our Body of Knowledge. T Clearly. our approach has not been 'invented' in the normal sense. It does not require you to 'believe' in some theoretical model of behavior. Our knowledge is derived entirely from observations of the way people work in the real world. Our achievement has been to turn these observations into methods that replicate the techniques used spontaneously by high-performing inventors and entrepreneurs. I In the words of our founder, George Prince, what we've done is 'take an accident and turn it into a process.'



#### The 'silly' question is the first intimation of some totally new development.

#### Alfred North Whitehead

Someone once said that for every problem there is a solution that is simple, attractive ... and wrong.

The opposite of creativity is cynicism.

Arthur C. Clarke

Esa Saarinen



#### Synecticsworld® aphorisms

Join, don't judge ¶ Probe, don't assume ¶ Hunt for objectives, don't get bogged down in problems ¶ Stay loose until rigor counts ¶ Don't justify pessimism as realism; be an optimist with concerns ¶ Don't reject a weak idea; use its faults to better it ¶ Fight problems, not people ¶ Assume valuable implications ¶ Pretend the idea works ¶ Jump to favorable conclusions whenever possible.

## The ultimate solutions to problems are rational; the process for thinking them is not.

There is a contest within ourselves and within every organization between safekeeping and experimental thinking, which deliberately employs wishing, speculating, guessing, absurdity and approximation. This is the thinking we cultivate. Our aim is to make the unfamiliar familiar, to make the absurd have value, and to make connections from seemingly irrelevant things.

## If at first the idea is not absurd, then there is no hope for it.

#### Albert Einstein

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PROBLEMS WERE CREATED

AMORK IN WHICH THE

Albert Einstein



As long as you keep a person down, some part of you has to be down there to hold him down, so it means you cannot soar as you otherwise might.

Marian Anderson

Since finding out what something is is largely a matter of discovering what it is like, the most impressive contribution to the growth of intelligibility has been made by the application of suggestive metaphors.

Jonathan Miller

The metaphor is probably the most fertile power possessed by men.

Ortega Y Gassett



## THE GREATER THE EMPHASIS ON PERFECTION THE FURTHER IT RECEDES

Haridas Chaudhuri

Chinese Proverb

SHOON THE MANAGER POINTS TO THE MANAGER POINTS TO

Go
some
distance
away because
the work appears
smaller and more of it
can be taken in at a glance,
and a lack of harmony or proportion is rapidly seen

#### Leonardo da Vinci



The aspects of things that are most important for us are hidden because of their simplicity and familiarity.

Ludwig Wittgenstein

Some people will like me and some won't.

So I might as well be myself,
and then at least I'll know that the people who like me,
like me.

**Hugh Prather** 

You see things: and you say 'Why?' But I dream things that never were: and say 'Why not?'

George Bernard Shaw in Back to Methuselah





#### Dewey Bunnell, America

Creativity
is the
ability
to see relationships where
none
Thomas Disch exist



A problem is a chance for you to do your best.

**Duke Ellington** 

When choosing between two evils, I always like to try the one I've never tried before.

Mae West

In the business world the rearview mirror is always clearer than the windshield.

Warren Buffett







#### **Our Body of Knowledge**

Since the first time one of our founders turned on a cassette recorder to tape a team meeting, we have been studying, understanding and refining our Body of Knowledge about how people think, work and collaborate together. It's safe to say that our Body of Knowledge gives us as deep an understanding of the building blocks of successful collaboration and innovation as any in the industry. And as we see today's most sophisticated tools for understanding human behaviors substantiate the same outcomes that our founders reached with only their simple recorder, we can only marvel at and appreciate their true genius. ¶ Today our Body of Knowledge has evolved to include new frameworks that apply the principles of innovation and collaboration to a range of challenges and opportunities that would've seemed surprising back in the 1960s. And while you will find many new techniques that have been incorporated into our Body of Knowledge over the years, the underlying concepts of climate and process would be immediately recognizable to our founders as their own groundbreaking work.

#### The power of connections and wishes

Synecticsworld<sup>®</sup> has helped many client teams in all aspects of the new product development process. Examples include General Electric's line of self-diagnostic appliances, Gillette's Silkience<sup>™</sup> hair-care brand and helping name a new snack food for Nabisco, judged to be U.S. New Product of the Year in the year it was launched.

## Curiosity has its own reason for existing.

#### Albert Finstein

In 1947, a Bedouin boy was searching for a goat that had gone missing among the cliffs on the coast of the Dead Sea. He saw a small opening, and being a curious youngster, tossed a stone inside. He heard an unexpected sound—the noise of shattering pottery. He returned with a friend and found several large earthen jars containing ancient parchment scrolls. The first experts who saw them said they were worthless. Later these Dead Sea Scrolls were identified as one of most important archaeological finds ever made.



# All great discoveries are made by people whose feelings run ahead of their thinking.

C. H. Oakhurst

Allistair Pilkington was washing dishes when he observed grease forming on the dish water. He connected this to a problem he'd been thinking about: how to make plate glass smooth. He made an absurd wish: 'I wish I could make plate glass by pouring it on water so that it would be perfectly flat.' This idea revolutionized the glass industry after he'd worked out a way of pouring molten glass onto liquid tin. The technique is now used worldwide.



### If you can dream it, you can do it.

#### Walt Disney

Fred Smith's astounding idea that parcels could be delivered overnight at a profit using a private airline system with a centralized hub barely got him a passing mark in college. More thinking about the idea while flying missions in Vietnam led him to pursue it when he returned. The company became known as Federal Express.

# If you have built castles in the air, your work need not be lost; that is where they should be. Now put the foundations under them.

Henry David Thoreau

One of the most profitable wishes of all time was made by the daughter of Dr. Edwin Land, founder of Polaroid Corporation. His daughter once wished that she did not have to wait to get her pictures developed. That led to the absurd idea of a film that would develop itself on the spot. The rest is history.

#### Analysis kills spontaneity. The grain once ground into flour, springs and germinates no more.

#### Henri Frederic Amiel

Swiss engineer George de Mestral saw a connection between the burrs that stuck on his pants and a new way of fastening things—an idea that eventually led to the revolutionary material called Velcro™. (Velcro™ is a registered trademark of Velcro Industries B.V.)

## An invasion of armies can be resisted, but not an idea whose time has come.

Victor Hugo

Charles Goodyear accidentally spilled boiling rubber mixed with sulphur onto his brother's stove and realized that the resulting goo was the breakthrough he'd been looking for. Vulcanization became the key to the mass use of the automobile.

# Discovery consists of looking at the same thing as everyone else and thinking something different.

Albert Szent-Györgi

In 1964, Arno Penzias and Robert Wilson, Bell Lab scientists, were modifying a radio antenna so it could be used to receive signals from an early communications satellite. They tried to eliminate sources of background radio signals, but no matter what they did, they still heard residual static-like 'noise'. Their genius was to make the connection between the noise and new theories about big bang. They became the first people to hear the birth of the universe, winning Nobel prizes in the process.

## Think before you speak is criticism's motto; speak before you think, creation's.

E. M. Forster

A famous connection was made by Art Fry, who wished that the book mark in his hymnal would stop slipping out and falling to the floor. He wished that it would stick to the page yet could be removed without tearing the paper. This idea led to the development of 3M's Post-it<sup>TM</sup>, which employed an adhesive discovered but discarded several years before.

#### connecting

help listen share credit be fair casual accept consult interact build on dialogue take turns co-operate appreciate paraphrase self-disclose use empathy collaboration acknowledge deal as equals guess and test use 'I' language imagine along with negotiate decisions use approximate thinking take responsibility for self



#### dis-connecting

use 'you' and 'they' language punish self and others insist on correctness reinforce hierarchy use status symbols require obedience demand precision let prejudice rule be authoritarian mistreat/abuse make fun of enjoy perks be formal dominate

interrupt

discount

compete

threaten repress

control

shame

ignore

blame

reject

react

nag



Life does not consist mainly
—or even largely—
of facts and happenings.

It consists mainly of the storm of thoughts that is forever blowing through one's head.

Mark Twain

#### Nonsense

The importance of nonsense can hardly be overstated. The more clearly we experience something as 'nonsense', the more clearly we are experiencing the boundaries of our own self-imposed cognitive structures.

'Nonsense' is that which does not fit into the prearranged patterns we have superimposed on reality ... Nonsense is nonsense only when we have not yet formed the point of view from which it makes sense.

The Dancing Wu Li Masters: An Overview of the New Physics



#### Are these statements nonsense?

If glass is a fragile material, the ship can float

If the wings ice up, the word is abbreviated

If the teeth are sharp, the ground shakes



They seem absurd, devoid of meaning. But considered from another point of view, they make total sense.

is about launching a ship with a bottle of champagne

is about a skywriting plane that returns to base early because of weather problems

is about using a chain saw to cut down a massive tree

(from an idea by **Jeremy Campbell** in The Improbable Machine)



# CHINESE PROVER

### 级所聽到的 我都忘了

What I hear I forget

### 级所看到的 我都記了

What I see I remember

### 那麼我所 知道的該是什麼

What I do I know



#### There are some things that are so serious you have to laugh at them.

#### **Niels Bohr**

I pressed down on the mental accelerator.

The old lemon throbbed fiercely.

I got an idea.

P. G. Wodehouse

WE WE
DON'T SEE SEE
THINGS THINGS
AS AS
THEY WE
ARE ARE
Anaïs NIN







#### The answers are within

Essentially, our work is about helping you create and sustain a high-performing organization. We know from experience that the ideas on how to achieve this goal are lying dormant within your company. Our job is to help draw them out and give them practical shape. TOur basic assumption is that you know more about your business than we do. We believe that you have the content knowledge already. What we offer is know-how about the process of innovation. In short, we help you think about ways of helping yourself. \{\bar{\text{Sometimes}}, \text{turning}\} to a conventional management consultancy is the appropriate step to take. We believe, however, that more often than not the answers lie within your own organization waiting to be drawn out. TWe believe that everyone has the ability to be creative and to innovate. The problem is that these intuitive skills are often suppressed by education, cultural conditioning and misplaced competitiveness. ¶ Our skills are in bringing them back to life.

### Chop your own wood and it will warm you twice.

Henry David Thoreau



#### high-performing groups

informal experimental action-oriented high cooperation low defensiveness high levels of trust little second-guessing few trappings of power high respect for learning few rules and high flexibility low levels of anxiety and fear empowering of team members little discounting or disparaging failures seen as problems to solve decisions made at the action point people easily cross organizational lines many informal problem-solving meetings people pick up and correct the errors of others trouble puts people into 'problem-solving' mode willingness to take risks and learn from mistakes



rank is right little risk taking formal relationships privileges and perks many status symbols rules rigidly enforced slow action/great care much protective paperwork decision-making done at top high levels of fear and anxiety your problem is yours, not ours well-defined chain of command learning limited to formal training many information-giving meetings trouble puts people on the defensive little problem solving below top level crossing organizational lines forbidden need to bury mistakes or whitewash them carefully formulated rules and regulations complaints and discomforts go underground

#### low-performing groups



#### /7 Ways to murder an idea

- See it coming and quickly change the subject.
- Ignore it. Dead silence intimidates all but the most enthusiastic.
- Feign interest but do nothing about it. This at least prevents the originator from taking it elsewhere.
- Scorn it. 'You're joking, of course.' Make sure to get your comment in before the idea is fully explained.
- Laugh it off. 'Ho, ho ho, that's a good one, Joe.
  You must have been awake all night thinking that up.'
- 6 Praise it to death. By the time you have expounded its merits for five minutes everyone else will hate it.
- Mention that it has never been tried before. If the idea is genuinely original, this is certain to be true. Alternatively, say, 'If the idea's so wonderful, why hasn't someone else already tried it?'
- Say, 'Oh, we've tried that before'—even if it's not true. Particularly effective with newcomers. It makes them realize what complete outsiders they are.
- Come up with a competitive idea.
  However, this can still be a dangerous tactic, as you might still be left with an idea to follow up.



- Stall it with any of the following:
  - 'We're not ready for it yet, but in the fullness of time ...'

    'I've been wanting to do that for a long time, but right now ...'

    'Let's wait until the new organization has settled down...'
- Modify it out of existence. This is elegant. You seem to be helping the idea along, just changing it a bit here and there. By the time the originator realizes what's happening, the idea is dead.
- Try to chip bits off it. If you fiddle with an idea long enough, it may fall to pieces.
- Make a strong personal attack on the originator. By the time he or she has recovered, the idea won't seem so important.
- Appoint a committee to sit on the idea.

  As Sir Barnett Cox observed: 'A committee is a cul-de-sac down which ideas are lured, then quietly strangled.'
- Drown it in cold water. As in:

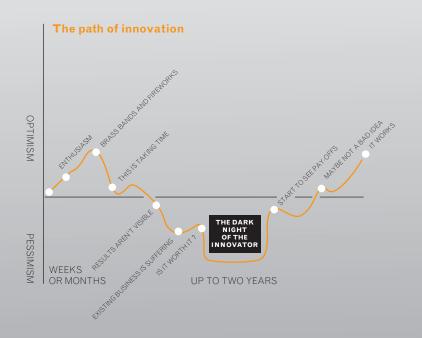
  'We haven't got the staff to do it ... the intangible risks would be too great ... that's all very well in theory, but in real life ...'
- Return it to sender with:
  - 'You need to be much more specific about your proposal.'
- If all fails, encourage the originator to look for a better idea.

  Usually a discouraging quest. If he or she actually returns with one, start them looking for a better job.



## Between the idea and the reality falls the shadow.

T. S. Eliot



Launching a breakthrough idea is like shooting skeet. People's needs change, so you must aim well ahead of the target to hit it.

Raymond Kurzweil

Half the failures in life arise from pulling in one's horse as it is leaping.

Julius Hare 1795-1855

Honest criticism is hard to take, particularly from a relative, a friend, an acquaintance, or a stranger.

Franklin P. Jones

None of us are as smart as all of us.

Japanese proverb



SOFTLY BECAUSE
YOU TREAD
ON MY
OREAMS
W. B. Yeats

#### swim with the stream. Nenes to left that only dead lish

Malcolm Muggeridge



#### Every new idea is born drowning

A new idea is at its most vulnerable during the first few moments of life. In any important relationship, one negative comment outweighs ten positives.

There is no limit to what a man can achieve as long as he doesn't care who gets the credit.

Bob Woodruff Coca-Cola

Think wrongly if you please, but in all cases think for yourself.

**Doris Lessing** 

Many ideas grow better when transplanted into another mind than in the one where they sprang up.

Oliver Wendell Holmes

Everything that irritates us about others can lead us to an understanding of ourselves.

Carl Jung







#### The need for innovation

The need to gain a competitive edge through profitable innovation is greater now than at any other time in our history. One of the things we've learned is that creativity and innovation do not happen in isolation. Innovation is either connected to an organization's performance by real issues in the marketplace or it doesn't happen. This realization is built into our approach. In our terms, innovation is as much about implementation as inspiration. TWhile the most visible application of innovative thinking is in developing new products and services, our work takes us into many other areas. What they all have in common is the presence of forces for change and the need for an innovative response. The task could be to implement new management and operational processes, to re-think strategies or even re-define an entire business. The goal could be to create a more entrepreneurial climate or to deal with the complex repercussions of a merger or acquisition. The innovative thinking might be needed to empower a service quality or TQM program. In every case, speed is crucial. In these days of snowballing rates of change, whether an innovation is really an innovation depends on how long it takes to create and put into practice. Tone of the key benefits of Synectics world® is that it offers you a way to accelerate the innovation process. Time is like any other resource; it needs to be managed at an optimal level. With the right approach—the Synecticsworld® approach time can become one of your most powerful sources of competitive advantage.









#### Some famous last words

Who the hell wants to hear actors talk?

Harry M. Warner Warner Bros. 1927

There is no likelihood man can ever tap the power of the atom.

Robert Millikan Awarded the Nobel Prize in Physics, 1923

Heavier than air flying machines are impossible.

Lord Kelvin President Royal Society, 1885



THAT'S NOT OUR PROBLEM...

A ship in harbor is safe, but that is not what ships are built for.

William Shedd

People cannot discover new oceans until they have the courage to lose sight of the shore.

Anon

Another word for creativity is courage.

George Prince



#### You can't argue with success

A big and very formal organization had many rules and regulations that seemed devoted to appearances rather than accomplishment. We thought this climate discouraged people from risking new ideas. The people we worked with admitted that these practices were inhibiting, but over and over they would say, 'you can't argue with success'. ¶ After weeks of frustration, we found a quote that said it all.

> 'Blight never does good to a tree But if it still bears fruit, let none Say that the fruit was in Consequence of the blight.'

> > William Blake

THE HOLE IS AT THE OTHER END OF THE SHIP



There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to institute a new order of things.

#### Machiavelli

Nothing is more dangerous than an idea when it's the only idea you have.

#### **Emile Chartier**

#### Abraham Maslow

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Learn to love change. Feel comfortable with your own creative intuition. Make compassion, care, harmony and trust the foundation stones of business.

Fall in love with new ideas.

Anita Roddick Body Shop

Everything you see and touch was once an invisible idea until someone chose to bring it into being.

Any powerful idea is absolutely fascinating and absolutely useless until we choose to use it.

Richard Bach

A Zen master once asked an audience of Westerners what they thought was the most important word in the English language. After giving his listeners the chance to think about such favorite words as love, truth, failure and so on, he said, 'No, it's a three letter word; it's the word 'let'. Let it be. Let it happen.'

W. Timothy Gallwey The Inner Game of Tennis



Life is either a daring adventure or nothing.

Security does not exist in nature, nor do the children of men as a whole experience it.

Avoiding danger is no safer in the long run than exposure.

Helen Keller



Men stumble over the truth from time to time, but most pick themselves up and hurry off as if nothing happened.

Sir Winston Churchill

Everyone has talent. What is rare is the courage to follow the talent to the dark place where it leads.

Erica Jong

The greatest mistake you can make in life is to be continually fearing you will make one.

Elbert G. Hubbard

Don't be afraid to take a big step if one is indicated. You can't cross a chasm in two small jumps.

D. Lloyd George

Risk and reward travel side by side.

Avoid one, and the other will also pass you by.

Anon







#### How we help our clients

A great deal of what we do can be described as facilitating. We first adopted the term in the 1960s to describe the catalytic role played by our consultants during meetings. Facilitating in this sense has now become part of business language. ¶ A lot of our work is focused on stimulating fresh thinking in managers and leaders with the aim of bringing new power and perspectives to their organizations. In strategic planning assignments, we tap the expertise of the client's own planning team, knowing that the important thing about a strategic plan is not the paper it's printed on, but the process it creates within an organization. The frequently work with clients to facilitate culture change, whether the transformation is being driven by shifting paradigms in the market or by internal events, like mergers or acquisitions. ¶ Many clients look to us for help in creating profitable new products and processes, often drawing on our unique research process for tapping the creativity of customers. We structure our product development assignments so that we not only assist with the birth of new ideas, but stay with them all the way to the market. Clients also use our consultants to help them create or revitalize quality improvement programs. Another important area of work is developing high-performing managers and teams and promoting cross-functional teamwork. This often involves mounting an Innovative Teamwork Program, which enables people to invent better ways of working and performing together. While we are not a training company as such, we do a lot of training. Our strength lies in creating training programs tailored to the specific needs of each client.



Before enlightenment

### Chopping wood Carrying water

After enlightenment

#### Chopping wood Carrying water

Zen proverb



#### George M. Prince—Doodles

George spent a lot of time in meetings and calmed his anxieties by doodling. He carried a pocketful of colored pens to make them more interesting. Most date from 1965 to 1985. Some avid collectors regard them as works of art!













#### I hate quotations

Ralph Waldo Emerson

#### We'd like to talk with you

If you'd like to know more about Synectics world® and how we can help, please call 1.866.691.5709 / 247 or visit our website at www.synecticsworld.com



