

## EXPLORE THE IMPOSSIBLE



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**Title:** EXPLORE THE IMPOSSIBLE  
a powerful 4-stroke tool for creativity

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## **Abstract**

It is an astonishing fact that people stop thinking far too early when they meet a challenge. Faced with a difficulty, many of us simply say "this is impossible"! In the others cases we usually jump at the first possible solution. The result of these self imposed thinking barriers is that we don't use our full resources. This can be very costly!

The proposed 4-stroke process helps you overcome these thinking habits and overcome what appears at first sight impossible. You will be able to "chase the unresolved" by developing innovative solutions to your issues.

EXPLORE THE IMPOSSIBLE is a simple four steps tool not to find just "a" solution, but to identify the best one, or, at least, the less worst solution to a problem. EXPLORE THE IMPOSSIBLE is the fruit of the collaboration between a creative inventor and a doctor specializing in the operational process of organizations. This method works as an engine to drive you towards new profitable territories.

Based on the natural process of creation EXPLORE THE IMPOSSIBLE follows four phases and the related emotions: IDENTIFICATION, INCUBATION, ILLUMINATION, and INTEGRATION. While this may sound simple at first, the timing and strict separation of each step is, like in a four-stroke engine, crucial to ensure an optimal result.

As an emotional concept, EXPLORE THE IMPOSSIBLE needs to be experimented only once, for example with a concrete problem as a brainteaser. This learning trough experience while at the same time identifying one's emotions will then allow anyone, as the emotional memory is an un-erasable support, to change his approach when faced with difficult to resolve challenges.

Created in 2005, EXPLORE THE IMPOSSIBLE is a real innovation as it adds helps us follow a very effective process when addressing our most difficult challenges.

EXPLORE THE IMPOSSIBLE is now available as a lecture or as a course from half a day to 3 days; depending on the ambition level of the participants. A brochure and a 3D puzzle help to support the transmission. During full length trainings, participants work on their own real cases and are coached to develop the best possible solutions.

## **Preamble**

When we manage to have two very different experiences meet the result can shed light on hitherto relatively unexplored areas. This paper is about the result of such a meeting. Olivier Pahud is an inventor and entrepreneur with a rare experience of working on stage. Dr Alfred Colliander is a specialist in working with organisations.

Throughout his career, Olivier Pahud has been able to work over some ten years in creating "artificial" impossible situations. He has had people assemble a simple looking plastic cube made out of six pieces. The cube disassembles quickly in case a single piece is taken away. Even though it looks like a simple challenge, assembling the cube requires nimble fingers, a good grasp of space and some perseverance.



Thanks to this easily repeatable experiment it has been possible to observe and study the reactions of hundreds of people of all ages and backgrounds as they try to extract themselves from an impossible situation. With time, it has also been possible to highlight what tends to block people during this process.

While reviewing these observations it came to our mind that it might be possible to transfer them to other situations if one managed to map the most productive process to solve impossibilities. Such a process would optimise the natural potential of individuals to outplay the impossible while avoid traps.

Once developed we fine-tuned the process by teaching it to groups up to ten people. During these seminars we also applied the process to real-life situations.

In parallel we reviewed a number of similar studies and found that people like Poincaré, Helmholtz (1903), Wallas (1926), Plattand Baker (1931), Sindeman (1987) and others had also been working on formalising this process to reach about the same conclusion.

The tool we present has been simplified so as to be applicable to a wide array of cases. In spite of this we hope that reading our paper will help you take the first steps in exploring the impossible.

## **Introduction**

This paper describes the natural process as well as the blockages people experience when confronted with an impossible situation. While doing this we focus on the very exact moment when the person "hits the wall". We have segmented and given this moment a rhythm to develop a process that ensures identifying the optimum solution to a problem within a determined time.

To teach people this method we start by creating impossible situations progressively moving to real-life dilemmas. We then explore together some real impossibility to open up new horizons and highlight our blockages and resistances. Throughout this work it is always the rigorous application of our own natural process that helps us go even further.

Rigour is required we have found because in general when we are faced with an impossibility we experience high anxiety which tends either to have us jump at the first available solution or then deny the very existence of the impossibility.

Slowing down the exploration process also made it possible to identify the emotions linked to each stage of the process.

While developing this tool we have consciously stayed at the individual level. We have however found that if working with groups the various phases of the process can be distributed taking into account the particular skills of participants.

## The "four rooms of change"

Metaphors and simple drawings are useful tools when describing processes. The following model developed by Claes Janssen, a Swedish psychologist, is particularly useful in our case. Claes Janssen is well-known for having shown the different stages of a change process. His contribution supports our case because he shows the importance of two intermediate stages before we can reach something new: The denial and the chaos phases. The denial phase is the period during which we don't see the problem, while the chaos phase describes the time when we don't yet see the solution.



*The four rooms of change: 1. Contentment 2. Denial 3. Chaos 4. Renewal*

Our tool focuses on the chaos room, when anxiety is at its height in front of what seems impossible and no solution has yet emerged. We keep "exercising" this very moment in order to decrease anxiety. This in turn helps decrease the time and energy usually spent on the denial phase. What we have found is that by giving more time and resources to the chaos phase the potential for good solutions increases.



*The four rooms of change optimized: 1. Contentment 2. Diminishing denial  
3. Increasing resources for chaos 4. Bigger and better renewal*

## **Defining the impossible**

To be in an impossible situation is in itself a paradox. If the situation is impossible one cannot be in it in the first place. In other words: The impossible is impossible only once it has been proven so.

In the chaos room the solution is not in sight, it exists however while being out of reach. There was a time when it wasn't possible to even imagine reaching the moon. However, President Kennedy made it a challenge and it was accomplished. Still, it remains unreachable, at least for most of us. The same logic applies to many challenges much nearer to us. This means that a situation is in fact only temporarily or under certain circumstances impossible.

Finally we can say that the impossible is born from a point of view, which is often only an illusion. This means that to outplay the impossible one needs will and implication, in short, to believe that it is possible.

*"They succeeded because they didn't know it was impossible" (St-Exupéry)*

Based on these reflections an impossible situation can be defined as a situation where one doesn't see an emerging solution, except if one is ready to invest some will to overcome one's perceptions. The impossible is a shapeless, dark, unknown mass where one has to go and pick the solution.

## **The four stages to explore the impossible**

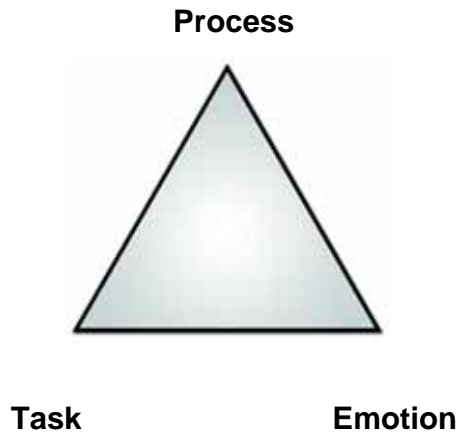
Our as well as our predecessors' method to explore the impossible can be split into the following four phases:

1. Identification – defining the impossible
2. Incubation – exploring the potential
3. Illumination – discovering the solution
4. Integration – Adapting to reality

These stages are like steps of a staircase which helps us overcome an impossibility. We have used their common "I" as a trick to help our students remember them.

## The triangle Process – Task – Emotion

Each step of the process has its task, and its particular emotion.

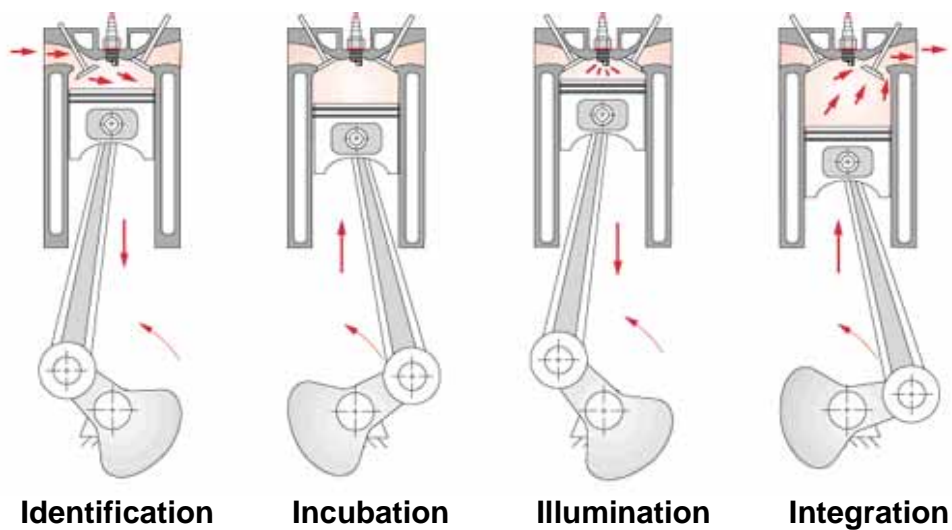


Linking each stage of the process to an emotion helps us recognise where we are in the process and thus "tame" our reactions and use them to our advantage. An emotion is much less frightening when it can be linked to a déjà vu.

### A question of rhythm

We have a natural tendency to jump stages and to want to reach our goal even before we start. This is something that needs to be moderated so that each stage in the process has the time it needs to be accomplished without however losing time.

We have used the following engine metaphor to support the need for rhythm and time:



With an engine it seems natural, that if a stroke is poorly adjusted the produced energy will not be optimised. The same applies to the creative process. Without rigour, the results will not be the best.

## **Learning**

Reading about emotions and a process isn't experiencing them. While reading this paper try for yourself our method. Put yourself into an artificial, impossible situation: Find a puzzle, or try for example to do something that you normally do with two hands with only one, or do something with closed eyes. The key is to experience how you feel in a situation which seems impossible to you.

Each stage of the process centres on a task. Take the opportunity to note how you feel at each stage and take a snap shot of your emotions to be able to recognize them another time.

Let's go now more in details into those four steps.

## **1. Identification**

### **Process**

The objective of the identification phase is to delimit the impossibility. We need to identify with as much precision as possible the obstacles towards the possible.

This first stage is crucial for the optimisation of the solution process because it helps concentrating our resources on the real issue which saves time.

In a zoo, when a lion makes an escape, each person takes part of a barrier and all create a circle around the area where the animal is supposed to be. The circle is progressively decreased until the animal can be captured.

This is somewhat the process that is followed here too. The issues are more and more delimited until they are isolated and identified. The difficulty becomes more "tamed" and less frightening.

### **Task**

Learning to know what the real problem is. Delimiting and identifying the real obstacles which create the impossible situation. Creating a kind of specification which the solution needs to fulfil.



Writing a few words down to resume the issues helps. It doesn't matter if they are only parts of the identified issue, the words can also be simplified or changed if needed. The important thing is to take some distance, to change points of view; it can even be useful to exaggerate the problem at hand. The key is to delimit precisely so that the targeting exercise is efficient and economical.

Once the problem is delimited it needs to be presented to a few people. This will help structure thoughts too and, last but not least, to learn to live with the issue.

### **Emotions**

Active curiosity, discovery of the real problem, a sort of naivety. An impression of entering a prison. First difficulties, as if one tried to catch a flock of flying birds.

### **Rhythm**

In the four stroke engine, the identification phase equals the injection. If one shortens this phase there will be less air and fuel for the explosion later on. It is important to take time to identify what the real issue is.

### **Obstacles and frequent errors**

This phase is often neglected or underestimated. We go ahead looking for solutions without knowing in which directions to look. The identification phase is not about looking for solutions! The task is to define the real issue.

Experience shows that usually the real problem isn't where we expect it to be. Even worst, we often invent problems where there are none in order to convince ourselves that it is not our fault if something is impossible. Even once time has been spent on the identification phase, if this step is poorly done, it can block the process or even have us drop the matter altogether.

## **2.Incubation**

### **Process**

Once the impossible is identified, the incubation stage explores all possibilities which could be part of a solution. A kind of solo brainstorming using other people only once necessary. It is about finding the best solution and being sure that it is the best.

Experience shows that we tend to jump at the first solution in order to reassure us and handle the issue. Again, writing down all possible solutions helps us free us towards other possibilities fuelled by a still unresolved issue.

### **Task**

Writing down on paper all imaginable potential solutions, even if they are parts only. Any method can be used to stimulate imagination. One possibility is to categorise solutions in three: logical solutions, absurd solutions and intuitive solutions.

In order to identify the best idea, it is important to write as many as possible down and to pursue searching once it seems that there are no more.

The method is to align all possible concepts and leave them to incubate. Doing something else tends to be helpful. It is good to ruminate at this stage.

Trying to associate ideas, combining various elements. Most innovations are in fact idea associations. Having fun crossing ideas between themselves [UN EXEMPLE?]

If there appear to be real difficulties starting this process, it is worth going looking for help. Selecting the right advisors. Explaining with clarity what the problem is about. Listening carefully. It is important to take into account that we are ahead of those who listen to us. Looking inspiration instead of scouting for readymade ideas.

### **Emotions**

A feeling of being in front of the wall, of digging once tunnel. Work, frustration, discomfort, research and exploration. Despair and dissatisfaction.

### **Rhythm**

With the four stroke engine, the incubation phase equals the compression stage. The more solutions are listed, the more pressure is created. The more pressure there is the bigger the explosion.

### **Obstacles and frequent errors**

As so often we end this phase too soon as we tend to jump at the first available solution.

In spite of the fact that it is seldom the best one. Which means that it is important not to make up one's mind too soon, but instead to stay open to further exploration. Let's remember that at this stage exploring costs only time whereas once a decision has been taken a decision to turn back again can be really costly.

### **3.Illumination**

#### **Process**

The illumination corresponds to the moment when suddenly a clear solution appears for the whole problem. A new light appears which shows the way to something new. This is the Eureka of Archimedes or the light bulb of Edison.

The illumination is given to us. It is like receiving a present. It is the (recompense) for the courage we have shown to explore.

The illumination never of course appears on command, but it is supported by thorough work up-front. Thomas Edison did more than 10,000 unsuccessful trials before finding the right thread. The better identification and incubation, the better results.

#### **Task**

Looking for the best ideas requires patience. It often happens that when we stop looking that we discover the rare pearl. The spark of a genius can take anything from an instant to many years to appear.

What if time is short? If worst comes to worst we have to pick the best possible idea from our list. It is as if the engine doesn't really start.

If on the other hand there is more time available, then perseverance is required to pursue incubation. It might even be worth at this stage to revise the initial identification.

When at last the illumination appears, take a break. There is really nothing else to be done than to show appreciation.

#### **Emotions**

A deep feeling of happiness. An inner peace, the joy of delivery, feeling of sacred. An impression of almightiness.

## **Rhythm**

In a four stroke engine the illumination corresponds to the gas exploding: the more it is compressed, the better the performance. It is a minute spark that ignites the whole.

## **Obstacles and frequent errors**

An illumination tends to blind us. It is important to stay calm and to pursue working. For the same problem there can be many illuminations. What is needed is to stay alert while learning to distinguish the really good ideas.

## **4.Integration**

### **Process**

This stage is about moving from the idea to reality, making it happen. It is time to descend on earth to make this new grain grow so that its quality can be appreciated without delay.

This delicate unfolding phase is a battle with the elements and those who want to tread on the newborn flower. The idea has to confront itself and gather strength in order to grow and become.

Integrating is like dipping a red-hot piece of metal into water: there is an inevitable choc before the result can be appreciated.

### **Task**

Try as quick as possible your new idea, with the "on-board" possibilities. Work first alone to clarify the presentation and to convince yourself it is a good idea.

Then comes the moment to select the right advisors to present them the solution. Watching and observing their reactions. Taking advantage of external advise. Avoiding being hurt but instead building on all comments. Obtaining a precise evaluation.

The integration is rarely easy; it is often the biggest part of the work. And, as was the case for the incubation, it is important to persevere. There will be many surprises: they can be addressed as separate impossibilities using the same process.

If in spite of all our efforts the integration doesn't succeed, moving back to the incubation phase can help identify a better idea. If really needed it might be best to go back to the identification phase altogether.

## **Emotions**

Fragility, work, perseverance, confrontation, conflict, discouragement, resilience.

## **Rhythm**

The last stroke of the engine expels the burnt gases out of the engine. This applies to work too and there is a need to rapidly put an idea into practice so that its usefulness can be gauged and to leave space for the next 4-stroke cycle.

## **Obstacles and frequent errors**

A lack of perseverance. Accepting a failure as something final. Not going back to incubation or identification. Insisting on a poor solution without questioning it. Lack of listening to external advice. And to the contrary, to let oneself be demolished by poor advisors.

## **Conclusions**

While many of us consider themselves well acquainted with the creative process our tool exaggerates it in order to optimise its performance. Applying the present process with care helps us surpass ourselves and results in often astonishing results.

This tool can help us react in a minute as well as pursue an impossibility over years. Each time it is enough to adapt each phase proportionally to the time available to stay within the four-stroke rhythm.

This method can be used for both simple and complex cases. With time and exercise the unknown will become more familiar.

Let's move towards the impossible!

We are happy to receive comments and cases at

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