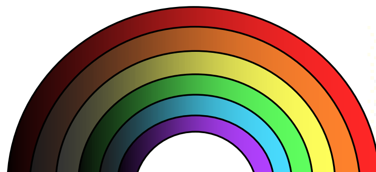
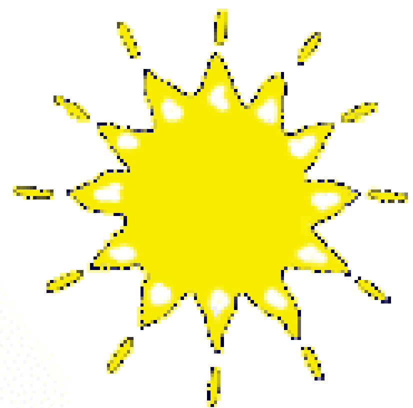
Book 2

Your rehabilitation

The rehab. guide of which this is book number 2 can be summarized as such :

If your rehabilitation is medically possible, your temporary willingness to suffer thereafter will allow you to enjoy decades of happy life.

I wish that you can, and will, take this decision.
I REALLY DO !

I heartily thank for their corrections and wise comments the persons who proofread the books in English or in French of the OYR! guide, or read them before their online disposal. They include Malika and Ambroise, Francois-Regis, Vicki, Adrien, Claude, Alexander and Pierre.

Some medical and paramedical professionals of whom I was a patient have read the sections of the guide to which their skills apply. The aim of their reading was first to point out my mistakes, then to help me correct them. Since I seek to avoid medical or paramedical speech, they pointed out very few things.
These professionals include my physician in the rehabilitation center, my psychiatrist, my second speech therapist and my general physical therapist with a private practice.

To you, who needs to rehabilitate. I wish that you can do so, and want to until a state that enables you to live a happy life.

“If life throws you lemons, make lemonade !”

J.Collins

“Optimize your rehabilitation !” guide

Executive summary

This set of 2 "mini-books" is a guide intended to provide inspiration, motivation, and practice ideas to a person who suffered a debilitating accident and has to rehabilitate.

The departure point of the guide is my own accident, which put me in a prolonged coma and severely damaged many of my physical and mental functions. The accident made me lose my ability to move, speak in a comprehensible manner, use my arms, and even think.
However, if my body was broken, my spirit was not.

Physicians and therapists did not expect me to walk or speak correctly again. The physician I had in the rehabilitation center told me : “You will not do anymore what you used to do”. As a matter of fact, I was a very visible handicapped person.
I refused to be “life-handicapped” and rehabilitated intensely for 5 years. Though I had no formal guide, I optimized my rehabilitation and completely “regained” myself.
I am now an **undetectable handicapped person**.
Therefore, my rehabilitation was a “success”. Moreover, had I from the onset had access to techniques laid out in this guide, I would have carried it out with less difficulty and much more quickly.

Accidents in life happen. Severe accidents can even cause a breakage in one's life.
However, that need not be the case.
This guide brings elements to victims who want to make the best recovery possible in the most optimized way, so that it **not** be the case.
It may also be useful to professionals working with people who are rehabilitating.

The two volumes of the guide are written for YOUR REHABILITATION :

Book 1 is the story of my rehabilitation : the medical consequences of the accident that caused it, and my challenging and motivational course through the personal development phases that had to be traversed to optimize my rehabilitation.
This “case study” intends to provide you with inspiration and practice examples for your own rehabilitation course.

Book 2 is a basis for your rehabilitation : supply of a framework for your rehabilitation journey, and exposure of my specific rehabilitations; they can lead you to rehabilitate more efficiently than I did.
This “rehabilitation manual” intends to help you figure your situation and focus on your rehabilitation, and to give you means that may be useful to you.
It will probably strengthen your motivation to rehabilitate, and help you do so.

Bon, and successful, voyage !

Preliminary comments

YOU CAN BENEFIT FROM THIS BOOK FOR YOUR REHABILITATION

In fact, you are very likely to do so. It is as follows :

- **The first part is a rehabilitation self-help "method".** It seeks to describe "why" to rehabilitate and "how" to do it.
- **The second part is applications of the method**. They illustrate its practice for each of my 4 specific rehabilitations. The latter were :

  - **EQUILIBRIUM** — Rehabilitation lasted 3 years. With what I learned during my rehabilitation, it would have lasted 1.75 year.
  - **SPEECH** — Rehabilitation lasted 4.5 years. With what I learned, and without having many other speech problems than those caused by dysarthria, it would have lasted less than 2 years.
  - **WRITING** (relearning to write) — Relearning to write lasted 4.25 years. With what I learned, it would have lasted 2.5 years.
  - **INTELLECT** — Rehabilitation lasted 4 years 5 months. With what I learned, I would have been aware that it could be carried out fully. So, I would have had a much greater peace of mind.

FURTHER, YOU MAY BENEFIT FROM THE ENTIRE OYR! PROJECT

The OYR! project is all derived from my rehabilitation. It comprises :

1. A **rehabilitation guide** :
   - Book 1, My rehabilitation
   - Book 2, this book, Your rehabilitation
2. A **website**, at the address : http:/0fix.free.fr/. It contains the guide, and resources I used to rehabilitate my speech from dysarthria. Everything on it is available for download.

   Comment : the website name « fix » with 1, 2 or 3 « x » was already taken. So, I added a zero in front of this term.
   Zero is a very interesting value : it is worth nothing, but one billion uses 9 such symbols... thus, it is to be viewed here as a potentiality : the one within you, which you will make appear through your rehabilitation.

INTENDED READER

The intended reader of the guide is any person who wants to rehabilitate, and who can do so at least partially on her own.

To rehabilitate is to "fix" oneself to regain the ability to walk the course of one's life after an accident : a car or (motor)bike accident, an accident at work, an accident during leisure... an accident of life.

The definition of the level up to which you want to rehabilitate is yours. Entirely yours.

However, you must absolutely ask your paramedical therapist her opinion about your handling of your rehabilitation.
She will probably strongly support it, but you have to consult her before beginning to optimize your rehabilitation.
Actually, if you face a definitive negative preliminary judgment, you must not carry out the type of rehabilitation this guide presents.

A PHYSICIAN OR A PARAMEDICAL THERAPIST CANNOT SAY THE 2 CENTRAL MESSAGES OF THIS BOOK. ON THE OTHER HAND, I CAN

The 2 central messages of this book are :

1. **Life must be personally taken charge of. So, rehabilitation must be personally taken charge of.**
2. **Rehabilitation is psychological. So, if medically possible, it is the product of the will of the person who wants to rehabilitate.**

These messages are obvious to physicians specialized in rehabilitation. Nevertheless, they do not express them, because it would be inappropriate that they do so. The physician I had in my rehabilitation center was right not to tell them to me. Such talk on his part would have led me to consider him a base bonesetter without any regard for his patients.

These messages do not come from a physician.
They come from a former patient of a rehabilitation center, after he has experienced the power of psychology on his general rehabilitation and each of his specific rehabilitations.

Psychology does not play a complex role in rehabilitation. Its role within it can be summarized as such : to rehabilitate, one must **WANT** to rehabilitate. To **TRULY WANT** to rehabilitate may allow to go beyond, not what medical and paramedical professionals judge impossible, but what they consider possible.

MY REHABILITATION TESTIFIES TO THE REHABILITATION GUIDELINES EXPOSED BY THIS BOOK

In spite of a difficult and complex rehabilitation case, I carried out as complete as possible a rehabilitation, related by Book 1, My rehabilitation. Yet, I did not have a guide that would have :

- presented the practical logic of rehabilitation, and a certain execution approach of it
- described the optimization of specific rehabilitations similar to mine

These pieces of information would have allowed me to save much time and effort.

I FORMED THE CONCEPT OF OPTIMIZED REHABILITATION *ONLY AFTER* THE END OF MY REHABILITATION

I conceived optimized rehabilitation only after I ceased working on myself; actually, I was much too involved carrying out my specific rehabilitations, and I was for a long time too intellectually weak, to be able to form this concept.
I carried out only vaguely the optimized rehabilitation this book tries to present clearly.

MY ABSENCE OF MEDICAL EDUCATION, AND THE NATURE OF THIS BOOK, LEAD ME TO MINIMIZE THE USE OF MEDICAL TERMS

I do not possess the medical education necessary to use these terms without risking mistakes.
So, I try whenever possible to avoid medical terms more complex than “bandage”.

Moreover, this book is not a pamphlet for a particular medical treatment, written for physicians by a medical specialist. It is the second book of a guide about the carrying out of rehabilitation, written for people who want to rehabilitate by a former visibly handicapped person.
In this context, medical terms would obscure my writing.

THE BOOKS OF THE GUIDE HAVE NO STYLE AT ALL, AND MAY SOMETIMES APPEAR VERY DETAILED. THESE TRAITS ARE INTENDED

Two reasons for my lack of style :

- I do not have any literary style, and do not seek to hide my lack of it behind stylistic gimmicks.
- This book is about a general rehabilitation method and its application to 4 specific rehabilitations. This content cannot and must not be very stylishly presented.

Two reasons for the detailed nature of this book, each in the interest of the reader :

- Fist, I seek to bring to each person who wants to rehabilitate all elements she might find useful. I try to organize, to regroup and to present clearly the components of the guide.
- Second, I aim to set out in a workable manner rehabilitation concepts my rehabilitation made me aware of.
  I present these concepts as well as I can, although they may appear self-evident to some. I do so because in contrast to those lucky persons, before my rehabilitation I was not aware of them, often in part and sometimes in whole.

Last, some elements may appear to overlap between Books 1 and 2. They do not overlap, but logically proceed from one another. Indeed, the present Book 2, Your rehabilitation, directly follows from the recovery set out in Book 1, My rehabilitation.

THIS ENTIRE BOOK IS DERIVED FROM MY EXPERIENCE ONLY

I theorize only after I practiced. And I write what I write only if I experienced it.

Guide structure

THIS BOOK IS THE SECOND OF A "HOW TO" GUIDE TO REHABILITATION THAT COMPRISES 2 BOOKS :

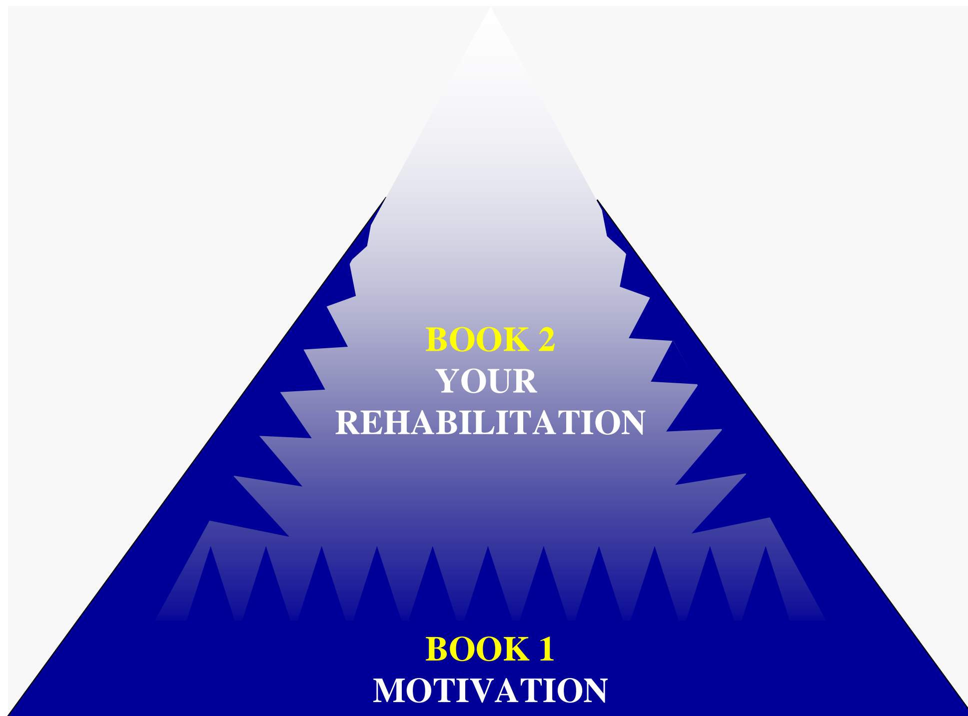
- **Book 1, My rehabilitation**, is a practice book which demonstrates the power of psychology on rehabilitation and exposes a rehabilitation practice.
- **Book 2, Your rehabilitation,** is a rehab self-help book, which contains :
    - a rehabilitation method
    - applications of this method

Six elements summarize the guide : **YOUR LIFE** / Your rehabilitation case / Your will / Your ability to act, to do / Your psychological energy / Your refusal of a plan B.

THE 2 BOOKS OF THE GUIDE COMPLETE THEMSELVES IN 2 WAYS :

First way :

Second way :



THE 2 BOOKS OF THE GUIDE ARE MADE OF 3 PARTS :

- Book 1, My rehabilitation : **1. Personal example**
- Book 2, Your rehabilitation : **2. Method**; **3. Illustration of the method by each of my 4 specific rehabilitations**

The "method" is adapted to any person who wants to rehabilitate, except very specific cases.

On the other hand, each "illustration" is adapted to no person who wants to rehabilitate, except very specific cases.

Paramedical therapists will rehabilitate you according to your rehabilitation case(s).
I do not have their years of studies and practice, and of course do not know your medical case.
Each "illustration" is only an example of the personal handling with the "method" of one of **my** rehabilitation cases.
I do not write this to "cover" myself. I write it for you.

Notes

1. I address the reader.

   I write for "you". This "you" is a synonym for "the person who wants to rehabilitate".
   This use is not :

   - False friendship. We do not know each other.
   - Marketing. I do not have anything to sell you.
   - Command. You decide yourself what you do.

   It is to be direct and concise.

2. I use by default the pronoun "she" in the English version of the guide.

   This is just a convention. In the French version of the guide, I use "il" ("he").
   The intended reader is any handicapped person, regardless of sex.

3. This book does not look like a professional product.

   This is because, although friends and people active in the medical and paramedical fields proofread or read it, I alone was responsible for the OYR! project.
   So, each book of the guide is a little imperfect : its layout could be enhanced, and it may have some grammatical and spelling mistakes. In particular, the English is just that of a person whose English is not his mother tongue.

   Please be so kind as to be indulgent.
   I was careful that the substance of this book be as good as I could make it.
   Please accept my apologies for the mistakes you may encounter while reading.

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3. Your rehabilitation has 2 mental consequences you have to prevent : decline in YOUR PSYCHOLOGICAL ENERGY (= mental energy) and saturation from rehabilitation

4. The grasp of your rehabilitation case, and the definition of your rehabilitation means and goal, call for realism

5. Complaints are not only useless, but also counterproductive

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Goal of this book

This book is a basis for your rehabilitation.
This basis exposes certain elements which have to do with rehabilitation. I had to rehabilitate, learned them doing so, and pass them on to you.
From this basis, you presumably can rehabilitate better and faster than I did.

This book is intended for 2 kinds of recipients, although it only refers to the first one :

- **A victim who *WANTS* to rehabilitate**.
  - This book may help her ***frame and reinforce her motivation***.
  - It may also:
    - lead her to perceive her medical case under the angle of ***her rehabilitation case***
    - make her realize the rationality and the importance of ***her concentration on rehabilitation***
    - provide her with ***rehabilitation means and practices*** that are savings for her in terms of time and effort
    - bring her to consider the ***uniqueness of her rehabilitation case***

      So, it is possible she :

      - ✓ ***adapt*** *exactly to herself* the rehabilitation exercises given by her therapist
      - ✓ ***imagine exercises*** *for the treatment of her unique rehabilitation case*

- **A victim who *needs* to rehabilitate**

  She may feel a little disheartened by the efforts her rehabilitation entails.
  This book may bring her motivational elements, and lead her to **WANT** to rehabilitate.

PART I

METHOD :

THE OPTIMIZATION OF YOUR REHABILITATION

PART I - METHOD :
THE OPTIMIZATION OF YOUR REHABILITATION

- Definition
  Chapter A
- Principles
  Chapter B
- Comments
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A. DEFINITION

A serious accident is seen as a definitive breakage in the life of a person. It is very often considered its physical consequences are mostly irreparable and will be important throughout her life.

FOLLOWING SUCH AN ACCIDENT, REHABILITATION OPTIMIZATON IS THE CARRYING OUT OF A REHABILITATION AS COMPLETE AS POSSIBLE.

IT RENDERS THE ACCIDENT NOT NECESSARILY A DEFINITIVE BREAKAGE OF A LIFE. IT AIMS TO REACH, THROUGH INTENSIVE REHABILITATION, A NEW LIFE SEGMENT.

It demands very tough rehabilitation efforts. But its fabulous reward makes them bearable.
These efforts accumulate into a rehabilitation investment for a future life segment.
You will perceive all your life the dividends of your rehabilitation efforts.

THE OPTIMIZATION OF YOUR REHABILITATION

GOES THROUGH

THE PERSONAL HANDLING OF YOUR REHABILITATION

DEMANDS

THE INVESTMENT FOR REHABILITATION OF A PERIOD OF YOUR LIFE

HAS A FABULOUS REWARD

A NEW LIFE SEGMENT

Generally speaking, an optimized rehabilitation, which is as complete as possible, is a rehabilitation that enables to live a happy life.

Therefore, it may be as complete as medically possible, or despite its name less complete but viewed as sufficient to live happily. Two actions summarize the optimization of your rehabilitation :

- To live almost only to rehabilitate during rehabilitation, to live fully after rehabilitation.
- To work intensely in order to reach the goal set by your rehabilitation coach (an unbiased personality within you solely dedicated to your rehabilitation).

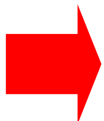
The optimization of your rehabilitation requires endurance and stamina, in not at all fairy tale-like living conditions.
As a sporting event, it would be a race on mountain footpaths, such as the Mont Blanc Ultra Trail (160 kilometers), run in great part with a forehead lamp under a North wind. This race is very tough. However, at its arrival stands a fabulous reward.

Another way to present the optimization of your rehabilitation is :

Within the framework of the personal handling of your rehabilitation,

1. optimal rehabilitation efficiency
2. multiplied by time.

- "optimal rehabilitation efficiency"
  - optimization of quality
    (research of the highest quality of exercises)
  - maximization of quantity
    (research of the maximum execution quantity of exercises)
- "multiplied by time" : daily repetition, during an extended period, of the rehabilitation exercises

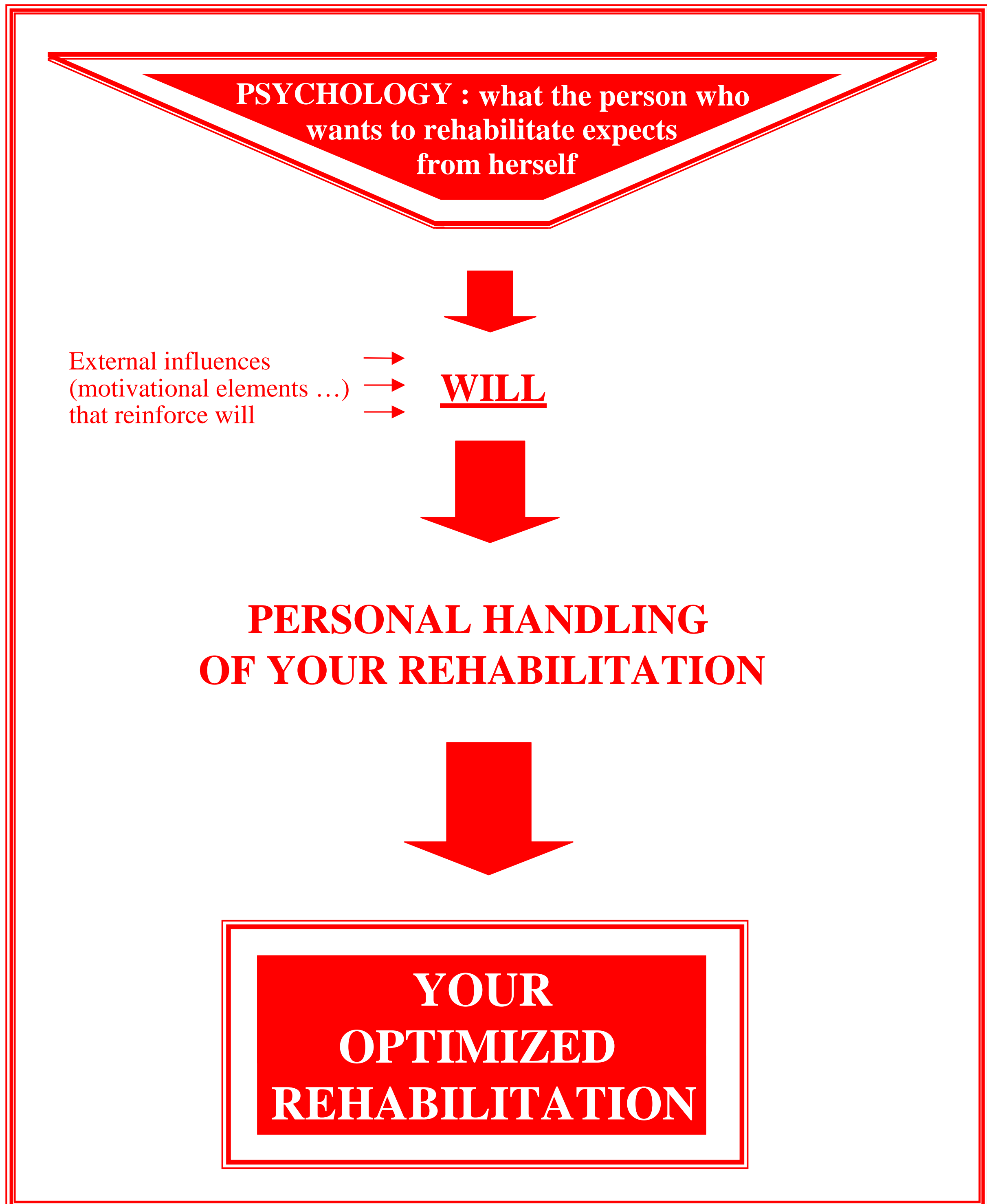


RESULT OF THE OPTIMIZATION OF YOUR REHABILITATION :
YOUR REHABILITATION AS COMPLETE AS POSSIBLE

The next two pages present a theoretical and a practical diagram of the optimization of your rehabilitation.

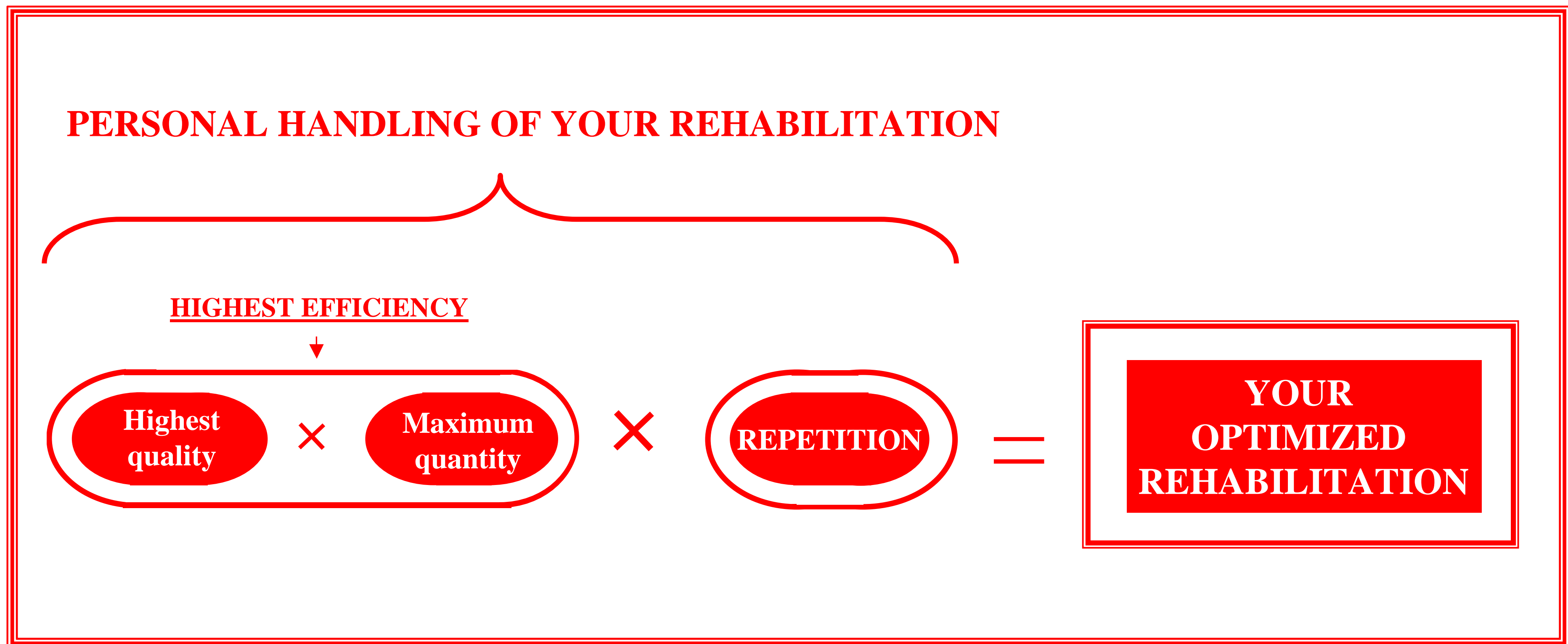
THE OPTIMIZATION OF YOUR REHABILITATION

Theoretical diagram



THE OPTIMIZATION OF YOUR REHABILITATION

Practical diagram



The above diagrams may appear overly simplistic in the extremely complex field of rehabilitation, and seem to say that to rehabilitate, to will is to do.

In the field of rehabilitation, to will is NOT to do.

Willpower is indispensable, but is not sufficient alone.
In the field of the body, everything is conditioned by the physical state of a particular body.
For example, it is not because a brilliant surgeon operates on a patient with all her expertise, that her patient will be medically well after the operation. For it to be the case, it is necessary that the body of this patient recovers, and does not develop negative medical after effects.
In the same manner, the fabulous goal of a new life segment is conditional :

Willing is,

- **under the condition of medical ability**
- **until a term you can push very far, but do not master**

doing your rehabilitation.

A more direct message would be a lie.
Rehabilitation is conditional upon the possibility to practice it.

However, it is self-evident that if you can rehabilitate and do not want it enough, you will not rehabilitate much.
Your rehabilitation is the consequence of your frame of mind, of your psychology.
Your psychology is the base of your will, which drives your rehabilitation.

Last, you want to rehabilitate for yourself, for yourself first and foremost.
No one else than you can want for you.

THE OPTIMIZATION OF YOUR REHABILITATION DEMANDS THIS REALIZATION :

YOU ARE COMPLETELY RESPONSIBLE FOR YOURSELF.

Essential comments on this rehabilitation approach

- **The psychology of the person who wants to, and can, rehabilitate drives ALL her rehabilitation.**
  (Hence the critical importance of her living conditions, which she has to spend the least time and energy on).

  Rehabilitation exercises are only **the means** of your rehabilitation. What drives their execution is **your will**.
  The person who needs to rehabilitate does so because she wants to.
  She will optimize her rehabilitation because she wants to optimize it.

- **Rehabilitation calls for you to look within yourself for a "rehabilitation coach".**

  You need to duplicate for your rehabilitation. This duplication will bring you 3 advantages :

  - **Determination :** You will be more resolute in the carrying out of your rehabilitation, because you will have to be faultless before your "coach".
  - **Clarity :** You will be more focused in the planification of your rehabilitation, because you will have to present your programme to her.
  - **Rigor** : You will be more thorough in the execution of your rehabilitation, because you will have to report to her.

  The guide of which this book is part tries to bring this coach motivational arguments, practical elements, and ideas.

- **Uncertainty marks the optimization of a rehabilitation, as it marks every element in life. Within this framework, your rehabilitation is to be carried out by WILLING its term to be positive.**

  For example, a parallel between :

  - the studies of a person
  - the optimization of the rehabilitation of another person

  - The person who studies knows her studies will not necessarily enable her to obtain the diploma for which she studies.
    However, if she studies to the best of her ability and as much as she can, she will almost certainly obtain this diploma.
    And, if she does not study, she cannot obtain it.

Similarly :

- The person who rehabilitates knows her efforts will not necessarily make her obtain a rehabilitation that enables her a happy life.
  However, if she rehabilitates to the best of her ability and as much as she can, she will almost certainly obtain a rehabilitation that enables her this happy life.
  And, if she does not carry out an optimized rehabilitation, she cannot obtain it.

  This uncertainty compels her to stick to the present during her rehabilitation. She must rehabilitate to the best of her ability and as much as she can, in order not to have remorse after her rehabilitation.
  Whatever the outcome, she will then have done everything she could to rehabilitate. And the outcome is very likely to be positive.

- **The person who optimizes her rehabilitation must resist feeling that she did everything she could.**

  A danger is that :

  - psychological weariness
  - the slow rhythm of rehabilitation improvements
  - the long time span of her rehabilitation

  result in this person thinking she did "everything she could", whereas it is perhaps not yet the case.
  Regarding myself, I sometimes felt I had done everything I could for my speech rehabilitation; however, I was not certain of it so I went on rehabilitating, and subsequently very significantly progressed.

  However, the present comment is not inflexible.
  The person who optimizes her rehabilitation, who feels she did everything she could, has to act the following way : first, to resist that feeling and to go on rehabilitating for a period, for instance 2 months; then, to objectively assess whether an improvement occurred.
  If it did occur, she will have to ponder it. She may then judge it, not too weak in absolute terms (rehabilitation improvements follow a very slow rhythm), but possibly too weak with respect to her time and energy investment.
  If this is the case, she can think she truly did everything she could, and stop her rehabilitation.

- **Last, optimized rehabilitation is based on an ACTIVE approach of life :**

    - To climb over obstacles, to go higher than the “cliffs” of life, enables to develop and to live fully.

    - To go beyond the physical consequences of your accident, through the optimization of your rehabilitation, enables you to climb over the “cliff” of life that stands before you.

      After having climbed this cliff you will live, in the plain that will then lay open in front of you, **a new life segment**.

    - That a person who needs to rehabilitate, and who can do it, decides not to optimize her rehabilitation, would make her choose to stay in the cold and barren shadow of a “cliff” of life.

B. PRINCIPLES

1. It is necessary that you...

   a. ...realize the importantce of your rehabilitation is that of **YOUR LIFE**

   b. ...understand you can personally take charge of **YOUR REHABILITATION CASE**

   c. ...do not *want*, but **WANT**, your rehabilitation

   d. ...consider your body as your company

   e. ...seek first and foremost quality optimization, *only then* quantity maximization

2. The length of a life means a long rehabilitation fully makes sense

1. It is necessary that you...

a. ...realize the importance of your rehabilitation is that of YOUR LIFE

LIFE TAKES THE FORM OF FLOWS, BUT CUMULATED "FLOWS OF LIFE" CONSTITUTE A "STOCK OF LIFE".
THIS "STOCK OF LIFE" IS THE EXISTENCE OF EACH PERSON FROM HER BIRTH UNTIL HER DEATH.

AFTER YOUR REHABILITATION, YOUR WHOLE LIFE WILL BE DETERMINED BY THE STATE OF YOUR BODY :

- **YOUR FAMILY LIFE**
- **YOUR LIFE WITH FRIENDS**
- **YOUR PROFESSIONAL LIFE**

YOUR ENTIRE LIFE AFTER REHABILITATION.

Your rehabilitation will very significantly increase the value of your « flows of life », therefore of your "stock of life".

b. ...understand you can personally take charge of YOUR REHABILITATION CASE

Without education specific to the area concerned, a medical case is extremely difficult to treat.

On the other hand, a rehabilitation treatment enables, and deserves, a personal investment on your part. 3 reasons to this :

1. Your medical case is the foundation of **YOUR REHABILITATION CASE : what are the negative consequences of your medical case on the handling of your body, and how can you act on them, or despite them, to rehabilitate ?**
2. The execution time length, nil for a medical examination, is very important for a paramedical therapy.
3. No one other than you knows your body better than yourself. This is especially true if you are attentive to it and careful not to have any preconceived idea about it.

c. ...do not *want*, but WANT, your rehabilitation

When a person is in love with another one, the other takes a critical importance. The person in love thinks almost all the time about the way to conquer the other.
She does not *want* the other, she WANTS him.

Likewise, when a person optimizes her rehabilitation, her rehabilitation takes a critical importance. The injured person thinks almost all the time about the way to conquer her rehabilitation.
She does not *want* to rehabilitate, she WANTS to do so.

The person who needs to rehabilitate, and who can do it, has to WANT her rehabilitation.
The will she applies to her rehabilitation will almost certainly transform her desire to rehabilitate into effective rehabilitation.

THE OPTIMIZATION OF YOUR REHABILITATION REQUIRES THE SUBORDINATION TO REHABILITATION OF AN ENTIRE PERIOD OF YOUR LIFE.

YOUR WILL TO REHABILITATE TRANSFORMS THIS SUBORDINATION INTO ACTION.

d. ...consider your body as your company

Two consequences to this:

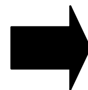
1. **Paramedical therapists are specialized medical consultants who work for your company, your body.**

Specialized consultants work to solve specific problems of a company. It cannot solve efficiently these problems without them.
In the same way, paramedical therapists are medical consultants specialized in a specific organic function of the body. You cannot rehabilitate efficiently without them.
You must not think your paramedical therapist will rehabilitate you as completely as possible. True, she will help you rehabilitate, but much less than you would if you took charge of your rehabilitation yourself. You have to consider her as a specialized consultant, and rehabilitate on your own thanks to her expertise.

2. **Your rehabilitation enables you to innovate in terms of exercises.**

That you adapt as well as possible your rehabilitation exercises to your rehabilitation case is of course indispensable. Further, you can innovate for your rehabilitation, invent entirely new exercises. Nobody tells you to act this way, you decide by yourself to do it. Rehabilitation innovation is possible for you, for :

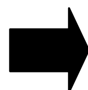
a. The judgment on your case is based on rehabilitation averages.



Not to be an average rehabilitatee belongs to you !

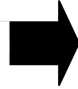
b. Unwritten medical judgments, always cautious, present a little latitude.

A responsible physician will always verbally deliver to her patient a prudent advice, never an optimistic one. She would be wrong to deliver an optimistic judgment, for the failure to reach her medical advice presents an important risk of psychological troubles.
However, what she says is less strictly “frozen” than what she writes. Consequently, a patient who WANTS to rehabilitate can go beyond.



You can go beyond the verbal advice of a physician !

3. **<u>If you reflect on your rehabilitation case, you will find exercises different from those of your therapist</u>.**



A unique rehabilitation case matters to you : yours !

You are for your therapist only one case among the dozens she simultaneously treats. You rehabilitate with her only a few dozen minutes per week. This therapist is critical for you. However, she cannot spend all her time to :

- adapt, not very well, not extremely well, but <u>near perfectly</u>, her exercises to the specific rehabilitation case of each of her patients
- seek new exercises for each of her patients

On the other hand, if a person decides to carry out as complete as possible a rehabilitation, she has her rehabilitation as only project. So, she will naturally find exercise ideas.

<u>Before its application, any rehabilitation idea must systematically be submitted to a therapist of the related domain. This specialized consultant will give her professional advice on the idea</u>**.** *This request of professional advice is of considerable importance. Indeed, to rehabilitate you must in no way waste time and energy.*
Consequently, if the therapist disapproves of the rehabilitation idea, it has to be forgotten immediately - I, myself, sometimes met a negative judgment, and gave up the rehabilitation idea. Conversely, in the case of an approval, you henceforward have to devise the most efficient way to practice it. The first thing you can do after her approval is of course to ask her practice advice.

e. ...seek first and foremost quality optimization, *only then* quantity maximization

Effort quantity in itself is completely absent from rehabilitation.

Quantity is simply the execution of the chosen qualitative approach.
This accent on quality because, if the quality of an exercise is bad, its execution serves little, can serve not at all, and can even have a negative impact on your rehabilitation.

Furthermore, if the quantity of rehabilitation efforts were pursued by itself, it would not allow rest and become unbearable.
The person who wants to optimize her rehabilitation would then stop to rehabilitate much before she reaches a state enabling her a happy life.

2. The length of a life means a long rehabilitation fully makes sense

I expose this because, if it is obvious to some people, I was not aware of THE IMPORTANCE OF IT WITH RESPECT TO MYSELF. I integrated it and rehabilitated. **It is the foundation of the optimization of your rehabilitation**.

THE LENGTH OF YOUR REHABILITATION IS TO BE VIEWED

NOT IN ABSOLUTE TERMS, BUT

RELATIVELY TO THE LENGTH OF YOUR LIFETIME THAT FOLLOWS IT.

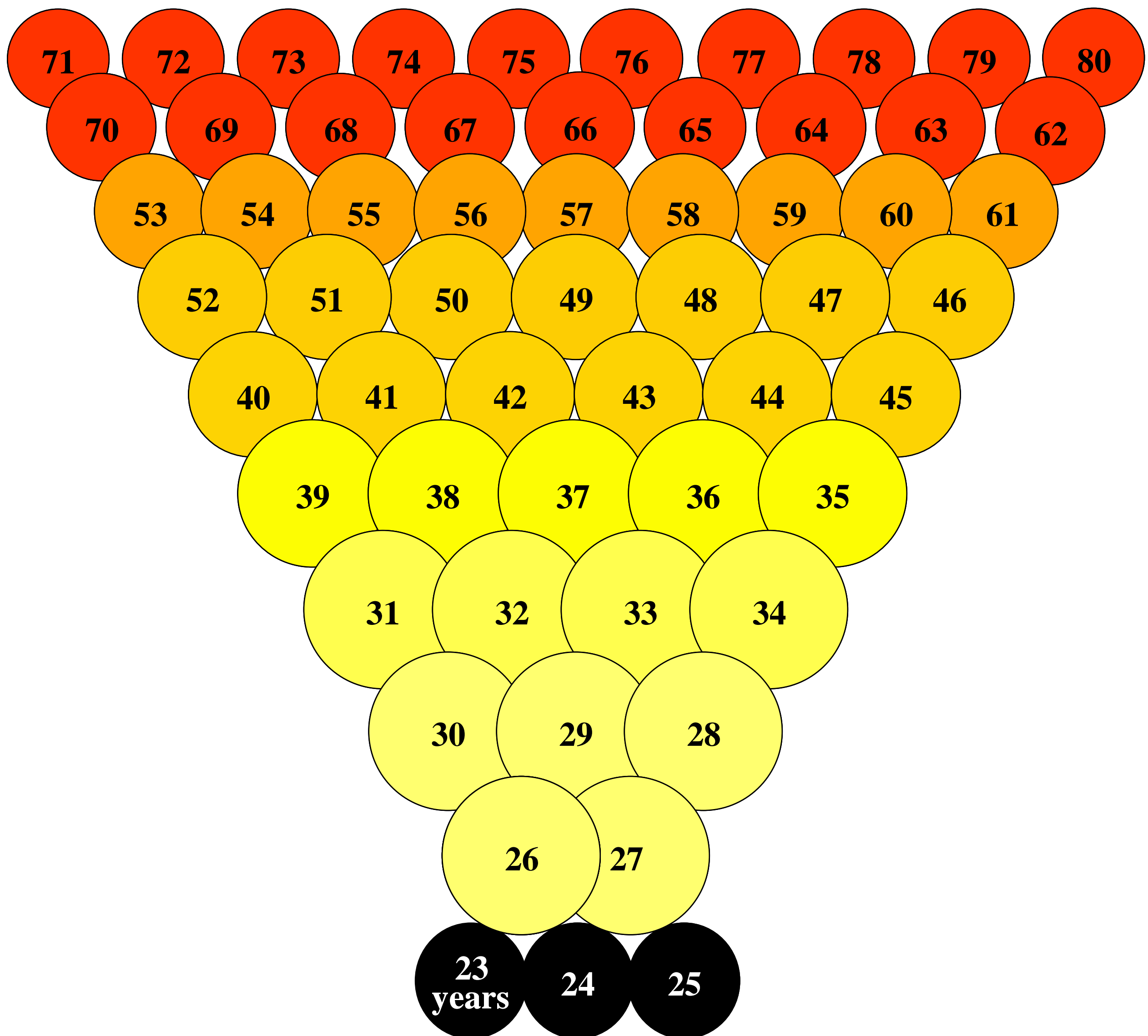
In truth, the quality of your life (= life possibilities + life quality) after optimized rehabilitation will be incommensurably higher than before it.
The relationship between rehabilitation length, and lifetime length after it, shows the rationality of optimizing your rehabilitation.

The example below illustrates this relationship :

Emma, who recently turned 23 years old, just had a serious accident. Its physical consequences make she needs to rehabilitate to enjoy life.
She decides to draw the consequences of her accident on her. So, she takes a sheet of paper, a pencil, and drawing pencils.

> She does not want the accident to have irreparable negative consequences upon her life; therefore, she figures out the rehabilitation years she needs to live happily, then represents them with her pencil.
> Next, she draws the years of her life that follow rehabilitation.
> Last, she colors the picture with her drawing pencils.
> She obtains a drawing of the implication of her rehabilitation upon her life.

This drawing appears on the following page.



Emma estimated her optimized rehabilitation investment to 3 years (in fact, she estimated it to 2 years but took, for caution, a 50% safety margin).
She represented it under the form of the 3 black circles hereabove, which show that she will rehabilitate during the years when she is 23, 24 and 25 years old.

She just celebrated her 23rd birthday. So, she statistically has a life expectancy at birth of 80 years.
Her situation regarding rehabilitation is the following :

- She will still live : 80 - 23 = 57 years.
- She will relive fully at : 23 + 3 = 26 years.
- She has in front of her, with her body rehabilitated as completely as possible :
  57 - 3 = 54 years of life.

She represented them under the form of the 55 (54 years = 55 limits) colored circles above her rehabilitation.

Emma drew the years of the "flowers bush of her life" with a size decreasing from its basis.
The years closest to the end of her rehabilitation are drawn greater. Indeed, she thinks she will enjoy life enormously after the end of her rehabilitation, then progressively a little less because living will have become normal again. In addition, she reflects her physical abilities may become less strong as she grows older, and as a consequence not enable her to do certain activities.

On the other hand, Emma drew the years of the "flowers bush of her life" with a hue increasingly vivid from its top.
The farther years are from the end of her rehabilitation, the more vivid they are, until 62years of age when color stabilizes to bright red. Indeed, she thinks she will become wiser and more able to enjoy life.

The extent of the "flowers bush of her life" after rehabilitation convinces Emma of the relevance to optimize her rehabilitation.
She thinks that the quality of her life will be much higher afterward : "I will be able to wash myself and eat by myself… I will be able to bring my child to the park and to play with her... I will be able to visit friends and to have talks with them... I will be able to play board games... I will be able to go jogging... I will be able to have a much different job than the one I would currently have..."

She wants to rehabilitate to her best and as much as she can. She is aware she cannot just try, because her rehabilitation will require several months of high intensity efforts to begin to produce satisfactory results. From the time she starts it, she will stick to it.

The day is a Monday. Emma tells herself she will spend the week to prepare the resolution of her rehabilitation need. This involves :

- The active analysis of **her rehabilitation case** : how can she rehabilitate by acting in the most efficient manner on the consequences of the accident on her body, or despite them ?
- The determination of **her rehabilitation goal**, of the goal of each of her specific rehabilitations if she has several ones.
- The definition of **her rehabilitation means** and of the most efficient way to use them.
- The elaboration of **her rehabilitation plan** : short-term roadmap for the exercises of her rehabilitation, for the exercises of each of her specific rehabilitations if she has several ones.

She will start her rehabilitation the next Monday, only after this preparation phase.

In the evening, Emma realizes her life is of passive origin: her parents had her be born. Her accident might have broken her life, and to rehabilitate is the occasion to personally shape it.

Her rehabilitation is a very active way to **determine** her life.

This reasoning yet reinforces her motivation to rehabilitate as completely as possible.

She thinks :

“"Faster, higher, stronger" is the way many parts of society work, but is definitely not the way I wish to live.
However, it is the way I will reconquer my ability to live”.

C. EXECUTION COMMENTS

1. Your personal handling of rehabilitation leads you to realize how to depend on ***others*** is positive

2. You have to determine rigorously your rehabilitation goal.
   Then, you must not think about it, but **DO**. You have to force yourself to stay in the present, and to do as well as you can

3. Your rehabilitation has 2 mental consequences you have to prevent : decline in **YOUR PSYCHOLOGICAL ENERGY** (= mental energy) and saturation from rehabilitation

4. The grasp of your rehabilitation case, and the definition of your rehabilitation means and goal, call for realism

5. Complaints are not only useless, but also counterproductive

6. Your rehabilitation goal must be attained through stages

7. The field of your rehabilitation is *in no way* representative of "real life"

8. Rehabilitating makes you realize your physical state might be much worse

9. You have to care only about what you can influence

10. Your decision to rehabilitate is very courageous. However, rehabilitation itself requires little courage

1. Your personal handling of rehabilitation leads you to realize how to depend on *others* is positive

The optimization of your rehabilitation demands your personal handling of it. Thankfully, this does *in no way* mean your rehabilitation depends only on you.

Others are sometimes seen as a source of life enrichment and of pleasure, but often considered a constraint. Rehabilitation optimization leads to realize that

THERE IS NO SEPARATE SELF

The dependence on others is strong and very often positive, for they bring :

- Skills

  Others sometimes have very complex skills you cannot master in addition to your own. And anyway, you could not perform numerous acts the state of your body necessitates.
  For instance :

  - You could not operate on yourself, as a surgeon operates you.
  - You could not professionally judge your rehabilitation, as a paramedical therapist judges it.

- Kindness

  Others sometimes make the effort to view the world as it appears to you. So, they imagine what you have to do to reach your rehabilitation goal.
  As a consequence, they tend to behave with kindness toward you. This kindness renders bearable the psychological pressure of an optimized rehabilitation.
  And, very simply, their kindness enables you to relax among them.

- Information pieces

  Last, others sometimes are very important sources of information.
  They may bring pieces of information critical to your rehabilitation.

The statement “(Thankfully) there is no separate self” is not at all idealist.
To depend on others is not always positive. The world includes people who commit incests, rapes, tortures, crimes, genocides... and who find to commit such acts completely rational and/or derive pleasure from them.

Thankfully, these people are exceptions.

The world also numbers people who are waiting for you to take an active role in your rehabilitation. They will then enthusiastically bring you their help.

Thankfully, these people are very numerous.

2. You have to determine rigorously your rehabilitation goal. Then, you must not think about it, but DO. You have to force yourself to stay in the present and to do as well as you can

a. "You have to determine rigorously your rehabilitation goal."

There would seem to be 2 different cases :

1. Attainable rehabilitation level expressed by a physician.
2. Attainable rehabilitation level unexpressed.

In fact, in each case, the attainable rehabilitation level is uncertain :

- In the first case, the uncertainty appears nonexistent, for a physician says the rehabilitation outcome will be positive.
  However, even in this case the outcome is uncertain :
  - A physician invariably expresses a very cautious rehabilitation level. Therefore, she is very likely to present a lower attainable rehabilitation level than the one you can reach.
  - It is highly unlikely, but possible, that a physician does not envision all the medical elements that will come into play.
  - You may **WANT** to go further.
- In the second case, you must yourself define the attainable rehabilitation level. So, it is fundamentally uncertain.

The uncertainty of your rehabilitation compels you to :

1. **Set yourself your rehabilitation goal.**

   However, you must be open to reassess it for factual reasons (positive or negative medical advice, strong upward/downward evolution or stagnation of your physical state)

2. **Determine yourself the means to reach your rehabilitation goal.**

   A very positive aspect of the optimization of your rehabilitation is that you are much more motivated to work for yourself than you would be to work for another "company" than your body. On that account, chances are very high you will select the most efficient rehabilitation means.

b. "[…] Then, you must not think about it, but DO. You have to force yourself to stay in the present and to do as well as you can. "

You have to force yourself not to think about the distant future, not to think about yourself once you will have reached your rehabilitation goal.

Present and near future are the only temporal dimensions of your rehabilitation.

Your rehabilitation demands you do everything you can to reach your rehabilitation goal. Yet, this goal is not, and your rehabilitation aims at making it become.
To think relentlessly about its uncertain reach would be much too painful, for the implications are very heavy.
Besides, your rehabilitation goal may sometimes appear very distant, and its reach most difficult. This feeling may result in a not altogether positive attitude toward your rehabilitation, causing lesser rehabilitation efficiency.
To prevent it, you must think only about the execution of your rehabilitation, not about its term.

In order not to lose hope, you must not hope.
You must DO.

As long as you cannot think about your rehabilitation as something of the past, you have to stay in the present and rehabilitate.

However, your confinement to the present must in no way block a hyper-optimism on your part regarding the evolution of your rehabilitation case. This hyper-optimism is indispensable to your motivation : it has a massive impact on your will, that drives you to carry out your rehabilitation.

3. Your rehabilitation has 2 mental consequences you have to prevent : decline in YOUR PSYCHOLOGICAL ENERGY (= mental energy) and saturation from rehabilitation[1]

a. Mental consequence of the execution of rehabilitation exercises : decline in psychological energy.

The execution of rehabilitation exercises requires an intense concentration and a maximized effort. So, it consumes psychological energy.

The "psychological energy" term combines 2 elements :

- The psychological will to reach the goal of rehabilitation exercises.
- Their energy requirement.

An analogy with an automotive rally videogame is telling :

- The race by a car results in a decline in its energy level throughout the circuit.
- Likewise, the execution of rehabilitation exercises by a person results in a decline in her psychological energy throughout her rehabilitation.

To rehabilitate is so tough that the person who does so has to KNOW that her efforts are worthwhile. A good psychological energy, paramount element of rehabilitation, results from this knowledge.

The replenishment of your psychological energy is very simple. It consists in realizing that life is beautiful, and that you will be able to enjoy it much more once you have rehabilitated.

Any pleasant or interesting activity enables a replenishment of your psychological energy. It may take the form of sport, a meeting with friends, a D.I.Y. activity, cooking, reading a book, watching a movie, ...

[1] Appendix A contains a list of works that may enable the replenishment of your psychological energy and your de-saturation from rehabilitation.

b. Mental consequence of life in rehabilitation optimization mode : saturation from rehabilitation.

The person who carries out an optimized rehabilitation thinks very often to the expected short-term effects of the exercises. Therefore, you will saturate from your rehabilitation : you will have enough to be continually thinking about it. Yet, you have to rehabilitate. So, you must de-saturate.

The following activities enable to de-saturate from rehabilitation :

- Any activity that does not imply thinking about rehabilitation, and ideally does not even enable this.
- The meeting with other persons, meeting which in no case must revolve around rehabilitation.
- The going away every few months from your usual living conditions, through for instance harvesting, holiday taking, ...

4. The grasp of your rehabilitation case, and the definition of your rehabilitation means and goal, call for realism

"***That's the way it is***" may seem a bland expression.
In fact, it is extremely powerful. It leads to see things as they are and to get used to them, at least temporarily.
To get used to them does not mean to accept them. To get used to them means considering them as they are, without having the view troubled, to then if necessary ask yourself : "What efficient act can I take to change them ?".
This realism is indispensable to the optimization of your rehabilitation, on 3 counts :

- The determination of the organic functions you can rehabilitate, and of their rehabilitation means.

  You have to "**understand rehabilitatorily**" your medical case : you have to perceive it finely but thankfully not in detail, to transform it into your rehabilitation case.

  This rehabilitatory understanding implies you leave aside the elements of your body you cannot modify no matter what you do.
  You will concentrate exclusively on the elements you can rehabilitate. Within this framework, you will work out the exercises best adapted to restore them. These exercises are all the most efficient ones for your rehabilitation, even if they are not commonly used in a paramedical setting, but only those.

- The definition of your rehabilitation goal.

  The field of rehabilitation is not at all appropriate for the determination of your rehabilitation goal : the state of rehabilitation that enables a happy life for you. Indeed, this field is much too favorable to you.
  Realism enables you to determine your rehabilitation goal out of it.

- The answer to the question you will at last ask yourself: "What do I have yet to do ? ".

  A realistic mindset enables to answer this question.

You must *in no way* entertain illusions about your physical state and the life it enables. And you must absolutely not let yourself be deluded by these illusions and cease your rehabilitation before you reach its goal. If you did so, you would pay the consequences of this during all the rest of your life.

You have to consider your rehabilitation case with as much realism as possible.

5. Complaints are not only useless, but also counterproductive

That you rehabilitate means you have the privilege to be able to do it. It is of critical importance that you realize you could be unable to rehabilitate. And, as a consequence, that you do not complain about your efforts.

Aside from the complete inadequacy of complaints in rehabilitation, they have :

- **an absence of positive consequences**

  Complaints of course do not allow in any way to solve a physical problem. Rehabilitation is tough... well, yes, and which is more it will be so daily during an extended period of time.
  The person who wants to rehabilitate has to accept straightforward the rigor of her rehabilitation regimen. It is simply a consequence of her will to rehabilitate. Your rehabilitation requires that you be tough with yourself during it, to be soft with yourself after it. You will tell yourself that

  your rehabilitation is a MUST, because it will allow you to live a HAPPY LIFE.

  As a matter of fact, after your rehabilitation you will sometimes realize that, without having carried it out, you could not do what you are doing, would not be where you are, would not meet the persons you meet...

- **Numerous negative consequences**

  a. Weakening of psychological energy

  ➔ *Lower willingness to rehabilitate, due to emphasizing the toughness of rehabilitation.*

  This emphasizing results in some reluctance in the execution of rehabilitation exercises.
  Yet, as point 10 of this chapter shows, **the carrying out of a rehabilitation does not require courage, but motivation : to rehabilitate is simply what has to be done.**
  There is no alternative choice, aside from choosing to have an entire life less beautiful than it could be.

  This choice is unacceptable. Complaints tend to make it appear acceptable.

b. Absence of de-saturation from rehabilitation

➔ *Lesser ability to rehabilitate, due to the absence of de-saturation from rehabilitation.*

To complain is to talk about oneself in rehabilitation, whereas others enable not to think about rehabilitation.
So, rehabilitation requires uttering no complaints, not in reason of complaints themselves but because uttering them does not allow to de-saturate.

c. Decrease of support from others

➔ *Endangering of rehabilitation.*

Complaints lead others to think they can only play a very minor role in the rehabilitation of the person who utters them. Actually, the person who complains does not seem able to work actively on her rehabilitation.
You certainly do not have to hide the physical problem against which you fight, on the contrary. To express its extent is in your interest, because it makes others understand the extent of your fight.
However, you must never complain about your rehabilitation.

If this is the case, others very likewise will try to play a useful role in it.
They will help you :

- **VERY** directly, through rehabilitation assistance or information.
- Directly, through the offer of occasions of replenishment of the psychological energy necessary to your rehabilitation.
  Such occasions can take the form of a discussion around a drink, a meal, a visit, a holiday...

6. Your rehabilitation goal must be attained through stages

Owing to the length and intensity of a rehabilitation, its goal must be reached through stages of a few months.
Three reasons to this :

a. This division of the rehabilitation goal into stage goals enables to maximize total rehabilitation effort.

   Indeed, the effort put out to reach the term of each stage will be repeated. The addition of these efforts has a much higher value than that of the unique effort to reach the term of a rehabilitation seen as a single unit.

b. The end of a stage enables to make the rehabilitation adjustments necessary to keep the effort as efficient as possible.

c. The end of a stage enables to rest a moment, for instance through a holiday.

A parallel can be drawn between :

- A not very well seeded professional tennis player who enrolls in a tournament and wants to win it.

and

- A person who begins rehabilitation and wants to rehabilitate as completely as possible.

Both goals are ambitious. Both can be reached, if the persons who try to attain them invest themselves enough, do their best and as much as they can.

The parallel is on the next page.

The professional tennis player who is not very well seeded, and wants to win the tournament :

She wants to win her games of the qualification rounds, then the game of the first round, of the second round, of the third round, of the quarterfinals, of the semi-finals, and of the final. If she does so, she will win the tournament.

- Each ball of a game of the tournament will require her highest concentration.
- As she advances in the tournament, each game will entail she adapt her play to that of a new adversary.
- During the whole tournament, her coach will prepare her to the next game.
A major element of motivation is that she will tell herself she has already played as well as she could to win several games and advance in the tournament. Therefore, she will not allow herself to fail, to lose the next game of the tournament.
- Between the games of the tournament, she will rest her body and her mind. This rest will enable her to prepare herself to the next game.

The person who needs to rehabilitate, and wants to win her body :

She wants to carry out as complete as possible a rehabilitation. If she does so, she will win (regain) her body.

Similarly to the above tennis player, she has to win "games" : she has to reach the term of each rehabilitation stage.
On the other hand, she does not have to beat anyone : she has to improve the temporary self she is today.

- Each exercise of a stage of her rehabilitation will require her highest concentration.
- As she advances in her rehabilitation, each stage will entail she adapt her practice and exercises to her rehabilitation improvements.
This adaptation need requires she be, during rehabilitation exercises, always attentive to the evolutions of her body.
It is VERY positive !
- During her whole rehabilitation, her "rehabilitation coach" (a personality within herself solely dedicated to her rehabilitation) will prepare her to the next stage.
A major element of motivation is that she will tell herself she has already worked as well as she could to pass several stages and advance in her rehabilitation. Therefore, she will not allow herself to fail, to be unsuccessful in the next stage of her rehabilitation.
- Between the stages of her rehabilitation, she will rest her body and her mind. This rest will enable her to prepare herself to the next stage.

7. The field of your rehabilitation is *in no way* representative of "real life"

The field of rehabilitation as your main activity comprises almost only on the one hand family members, close friends and friends, and on the other hand employees of a rehabilitation center, physicians and paramedical therapists.
The term "real life" designates life outside this field.

The family, close friends and friends, are of course not at all representative of people you will meet in society.

The employees of a rehabilitation center and the members of medical or paramedical professions are infinitely more tolerant and attentive to you than "real life" people, because :

- Employees of a rehabilitation center work all day long with patients who need to rehabilitate. So, they will try to make the stay of these patients as little unpleasant as possible.
- Physicians examine people who consult them precisely because they have a physical problem : they will not scold them for having it !
- Paramedical therapists rehabilitate, so constantly see people who behave, in a specific physical function, not as well as they might.

The behavior of these professionals is indispensable for the fragile persons they interact with all day long.
But, around you, they form a kind of **cocoon** that isolates you from "real life".
This cocoon diminishes your pains and medical problems, but also **YOURSELF**.

In "real life", you will not stay in a rehabilitation center the employees of which assist you, you will not live almost only among family members and friends, you will work and as a consequence have competitors, you will neither very frequently consult physicians nor constantly work with paramedical therapists...

You seek to rehabilitate as completely as possible to become able to leave this cocoon.

8. Rehabilitating makes you realize your physical state might be much worse

Your rehabilitation leads you to get out of the habit of looking higher, and makes you look lower.

You must not consider what some people have more than you, but what you might yourself have less.
Your physical situation is not as good as it could be, if you look upward. Otherwise, you would not need to rehabilitate.
However, your physical situation is much more favorable than it could be, if you look downward. For instance :

- If you have problems with one of your hands, your entire arm might have been immobilized or amputated.
- If your legs are damaged, you might be legless or confined to a wheelchair.
- If you are in a wheelchair, you might be a quadriplegic.
- If you have speech problems, you might not be able to express yourself at all.

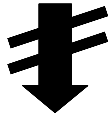
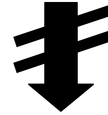
More serious than the temporary diminution of your physical state, you might have been born with a handicap, or be affected with a disease causing a physical handicap that worsens.

Finally, your physical problems result from an accident after you were born.
You might not have been born, therefore not be.

9. You have to care only about what you can influence

Your rehabilitation leads you to realize that, if :

you can master an important part of your body,	you can master an important part of your life,

nevertheless,  

you cannot positively influence, no matter what you do, numerous elements of your body.	you cannot positively influence, no matter what you do, numerous elements of your life.

Thus, you take as they are the elements you cannot positively influence no matter what you do, and you do not spend any energy on them.

You will not squander energy worrying about, or trying to act on, what is beyond your reach. You will then have as much energy as possible for your rehabilitation.

10. Your decision to rehabilitate is very courageous. However, rehabilitation itself requires little courage

A definition of courage resulting from my on-line queries is as follows :

"Courage : firmness of heart or strength of soul, which manifest themselves in difficult situations that force to a decision, a choice."

This definition highlights that courage belongs to decision-making, not to the execution of the decision.

So, the situation regarding courage of the next individuals is very similar :

- A person who determines to rehabilitate to regain her body.
- A knight who decides to floor a dragon to rescue a princess.

The knight's decision is very courageous.
On the other hand, his fight against the dragon will require determination, stamina and skill, but little courage. Actually, he cannot, in the middle of the fight, take a time out to examine the relevance of the struggle : "Hmmm... to fight, or not to fight ? Lets carefully balance the pros and cons."
If he did so, he would be burnt by the dragon and would fail to rescue the princess. If he meets respite during the fight, to go on fighting will require courage.
However, while he fights, he does not use courage; he does what is needed to reach his goal : to rescue the princess.

Similarly to this knight, a person who wants to rehabilitate faces the following actions :

- The choice to rehabilitate requires of her a lot of courage.

As a matter of fact, it is easier to give up on her life and let herself drift.

- On the other hand, the carrying out of her rehabilitation requires little courage.
  It requires determination, stamina and skill.

Thankfully it is so ! Indeed, you could not, every morning of a long series, give yourself moral kicks in the ass to motivate yourself : "Come on, be courageous ! It is very tough, but you nevertheless have to rehabilitate !" To have to motivate yourself every morning would be too painful mentally, and you would not hold the time length of your rehabilitation.

While you carry out your rehabilitation, you do not use courage; you do what is needed to reach your goal : to rehabilitate.

YOUR DECISION TO REHABILITATE IS VERY COURAGEOUS.

HOWEVER, MOTIVATED, YOU WILL NEED LITTLE COURAGE TO CARRY OUT YOUR REHABILITATION.

YOU HAVE MEASURED HOW YOUR ABILITY TO ENJOY LIFE AFTER REHABILITATION DEPENDS ON THE REHABILITATION OF YOUR BODY.

YOU REHABILITATE BECAUSE YOU KNOW THIS IS WHAT YOU HAVE TO DO.

Important remark stemming from rehabilitation principles and comments :

I noticed that beyond its effects on the body, a rehabilitation has consequences on the state of mind of the person who carries it out.

She invariably has to look positively and actively at her body and the elements that surround her, to be resolute, inquisitive and realist.
When you have achieved your rehabilitation, you will have improved your body, but also very probably your state of mind. You will for instance have taken the habit to appreciate the simplest elements of life, to precede every action with reflection...

So, a rehabilitation, in addition to its powerful direct physical benefits on your ability to live, can result in a strong indirect mental benefit on your way to live, and to enjoy your life.

Emma (chapter B, point 2) decided to carry out her rehabilitation without considering this strong indirect mental benefit. She notices it while in the course of rehabilitation, and it yet reinforces her decision to rehabilitate until a state that will enable her a happy life.

PART II

ILLUSTRATION :

THE OPTIMIZATION OF MY SPECIFIC REHABILITATIONS

PART II - ILLUSTRATION :

THE OPTIMIZATION OF MY SPECIFIC REHABILITATIONS

- Review
  Chapter A

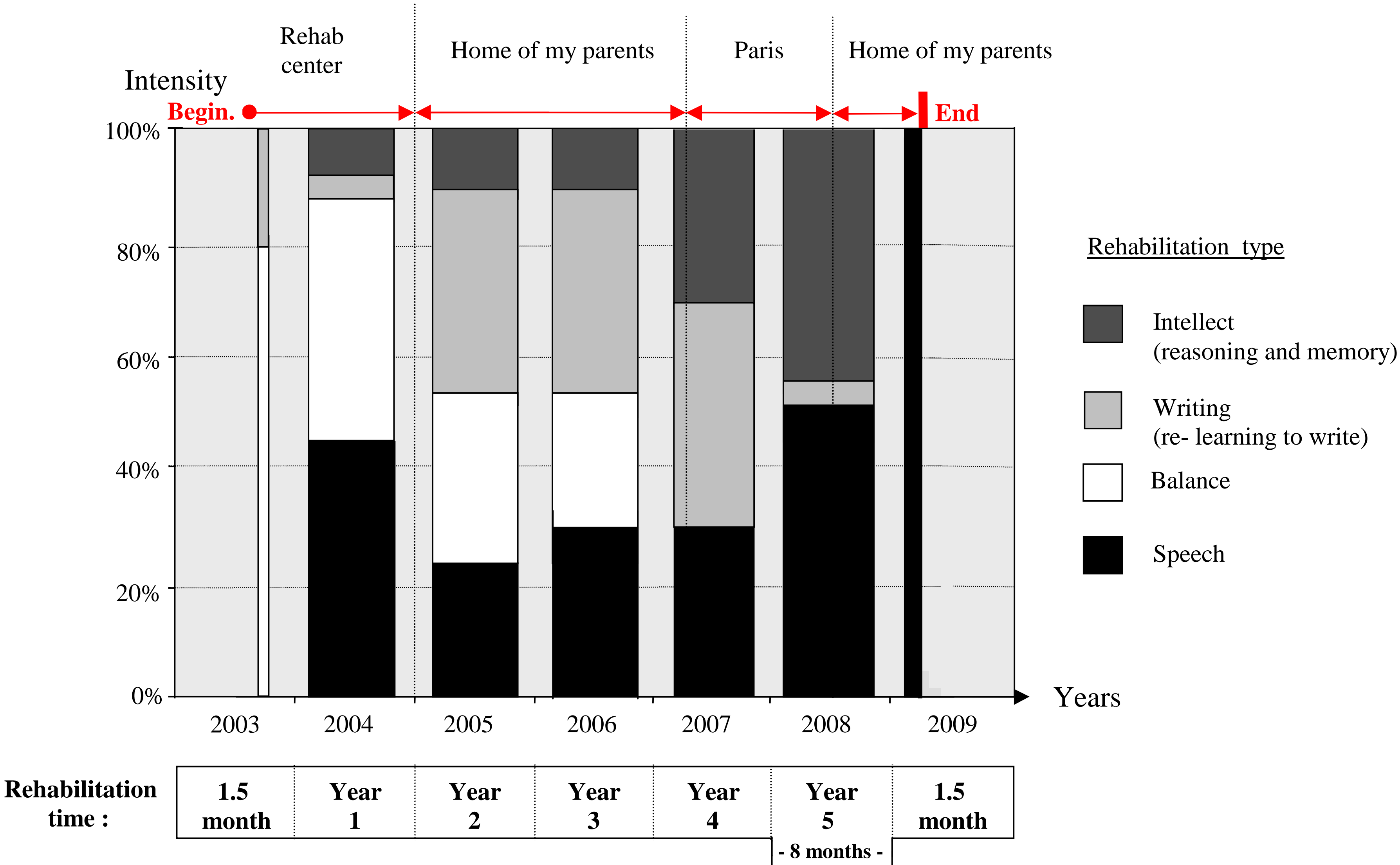
- My specific rehabilitations
  Chapter B

- Post-task comments
  Chapter C

Part II illustrates the rehabilitation method through applications to each of my specific rehabilitations (rehabilitations in particular areas).
In addition to its illustrative purpose, it may give you ideas if you have a rehabilitation case very similar to one I had. If you are not in this case, I suggest you read well only chapters A and C, and skim over chapter B.

To facilitate the possible adaptation to your rehabilitation case of exercises I practiced, I try to present them clearly :

- **Description**
- **Practice** : time period, and rhythm, of use
- **Personal use** : characterization
- **Rehabilitational benefit(s)**


Intensity of my specific rehabilitations
Rehab center
Home of my parents
Paris
Home of my parents
Intensity
Begin.
End
100%
80%
60%
40%
20%
0%
2003
2004
2005
2006
2007
2008
2009
Years
Rehabilitation type
Intellect (reasoning and memory)
Writing (re- learning to write)
Balance
Speech
Rehabilitation time :
1.5 month
Year 1
Year 2
Year 3
Year 4
Year 5
- 8 months -
1.5 month

A. REVIEW

Two points about this review :

- I followed during my recovery an experience curve of 3 to almost 5 years according to a given specific rehabilitation.
  So, I can think about it in **an informed manner**.
- I do not need to carry out a specific rehabilitation any more.
  So, I can think about it in **a detached manner**.

While I was carrying out my specific rehabilitations, I was not able to detach myself from them. I spent a major part of my time thinking about possible rehabilitation exercises, and executing them as well as possible.

Each of my specific rehabilitations is no longer a distant goal, but an achieved job, the execution quality of which I analyze after the fact.

1. Length

The figure on the previous page summarizes the conduct of my specific rehabilitations over the years.

It shows their respective place in my overall rehabilitation intensity (personal involvement in rehabilitation), not the time devoted to them.
There is between these 2 elements a strong, but far from perfect, correlation. I illustrate this as follows : the handling in 2006 of balance rehabilitation by a specialized physical therapist was very efficient. However, since I was in charge of a specialized paramedical therapist, I needed less personal involvement, so less rehabilitation intensity.

This figure shows I continued each of my specific rehabilitations well after my departure from the rehabilitation center in December 2004.
Indeed, my physical situation when I left it was incomparably better than when I had arrived, but not at all sufficient to live fully.

The overall length of my rehabilitation is 59 months (approximately 5 years), from mid-November 2003 to mid-February 2009 with 4 months without rehabilitation from April to July 2008. The most important length of a specific rehabilitation is that of my speech rehabilitation, 4.5 years. The overall length of my rehabilitation is greater than this length because I began specific rehabilitations in a spaced out fashion. The latest one, that of speech, began in March 2004.

2. Optimized rehabilitation necessarily implies "rehabilitatory innovation".

Rehabilitatory innovation is a cornerstone of optimized rehabilitation. It plays such a role because in this rehabilitation mode, as exposed in I.A. and I.B.d. of this book :

- Rehabilitation temporarily is the reason of life (for you to live fully thereafter).
- The rehabilitatee will innovate because she HAS to.
- Only one rehabilitation case, the treatment of which requires absolutely no medical knowledge, matters to the one who rehabilitates : hers.

Therefore, you will find rehabilitation exercises adapted to your unique rehabilitation case : as it is unique, it often cannot be treated at best by generic exercises.

As a proof of what I write, the table herebelow shows the role played in my rehabilitation by therapy sessions and personal means :

Rehabilitation origin

Specific rehabilitation	Origin	
	Therapy sessions	Personal means
Balance	**70%**	30%
Speech	35%	**65%**
Writing (relearning to write)	15%	**85%**
Intellect	8%	**92%**

Personal rehabilitation means play an important role in each case and, in 3 out of 4 of them, are the origin of the major part in rehabilitation. Of course, the "personal rehabilitation means" index does not necessarily imply innovation; in one case, the rehabilitation of intellect, there was rigorously none. However, for other specific rehabilitations this index is an acceptable proxy for innovation.

The table above shows that in several cases *I could rehabilitate only thanks to innovation*; it was necessary to treat my unique rehabilitation case :

- Speech rehabilitation would not have worked without an original speech rehabilitation mode (= exercises and regimen), "Pure Speech Rehabilitation".
- Writing rehabilitation (re-learning to write) would not have worked without substitution (from manual to electronic writing).

I innovated rehabilitatorily. So will you.

3. Large savings of time and effort are possible

During my entire rehabilitation I tried to make each specific rehabilitation as swift as possible; however, I needed almost 5 years to rehabilitate.
This great length of time is due to :

- The fragmentation of my rehabilitation efforts between specific rehabilitations.
- The gap between my initial physical state and my rehabilitation goal.
- The discovery of powerful rehabilitation means only during rehabilitation.

Had I known those means before recovering, they would have significantly shortened some specific rehabilitations :

- Balance : - 40% / - 50% (physical therapy specialized in balance).
- Speech : - 15% / - 25% ("Pure Speech Rehabilitation". The impact of it is not greater because, aside from injuries in the cranium, I faced several physical problems).
- Writing (relearning to write) : - 40% / - 50% (substitution of electronic writing for manual writing).

4. My rehabilitation tasks taught me the value of time for rehabilitation

Type and length of specific rehabilitations

	TYPE			
	Equilibrium	**Speech**	**Writing (re-learning to write)**	**Intellect**
Rehab. domain	Mostly phys. therapy	Speechwork and personal rehab	Occupational therapy and personal rehab	Neurological rehab and personal rehab
Beginning	Mid-November 2003	March 2004	December 2003	January 2005
LENGTH	**3 years**	**4 years 6 months***	**4 years 3 months****	**4 years 5 months****
End	November 2006	Mid-February 2009	May 2008	July 2009

* Four months without speech rehabilitation in 2008.
** Two months without intellectual or writing (re-learning to write) rehabilitation in 2008.

The table above shows that each of my specific rehabilitations was very long. Time enabled me to devise new rehabilitation means, or to do a substitution when I thought I could not rehabilitate further.
I do not think rehabilitation time ought to be viewed as a fixed quantity. On the contrary, I did my best to shorten each specific rehabilitation as much as possible.

Nonetheless, I think a rehabilitation MUST last a long time, for :

- ***Repetition*** **enables exercises, if their quality is good, to have a rehabilitation effect.**
- ***Adaptation of the body*****, very slow, adjusts it to the physical situation resulting from your accident.**

5. Two characteristics to manage : uncertainty and difficulty

Each specific rehabilitation aimed to allow me to rehabilitate as completely as possible. I had to rehabilitate so, because I did not want to suffer during my life from a lack of rehabilitation I should have carried out. If I rehabilitated so, I would have no remorse.

All my specific rehabilitations share 2 features :

- Uncertainty

  I carried out each of my specific rehabilitations in complete uncertainty over its rhythm and its term, for I could not master either.
  I taught myself to carry it out despite this uncertainty :

  - Rhythm : I tried to make it as high as possible.
  - Term : I did my best not to think about it.

- Difficulty

  Each specific rehabilitation was difficult until its end.
  This characteristic proceeds from a low starting point in each case.

But I reached a satisfactory term for each of my specific rehabilitations, and a life segment I will enjoy living lies in front of me.

B. MY SPECIFIC REHABILITATIONS

Next 40 pages.

1. Equilibrium

Rehabilitation thanks to therapy sessions : 70% - of which, at the center, 40% -
Personal rehabilitation : 30%

Summary

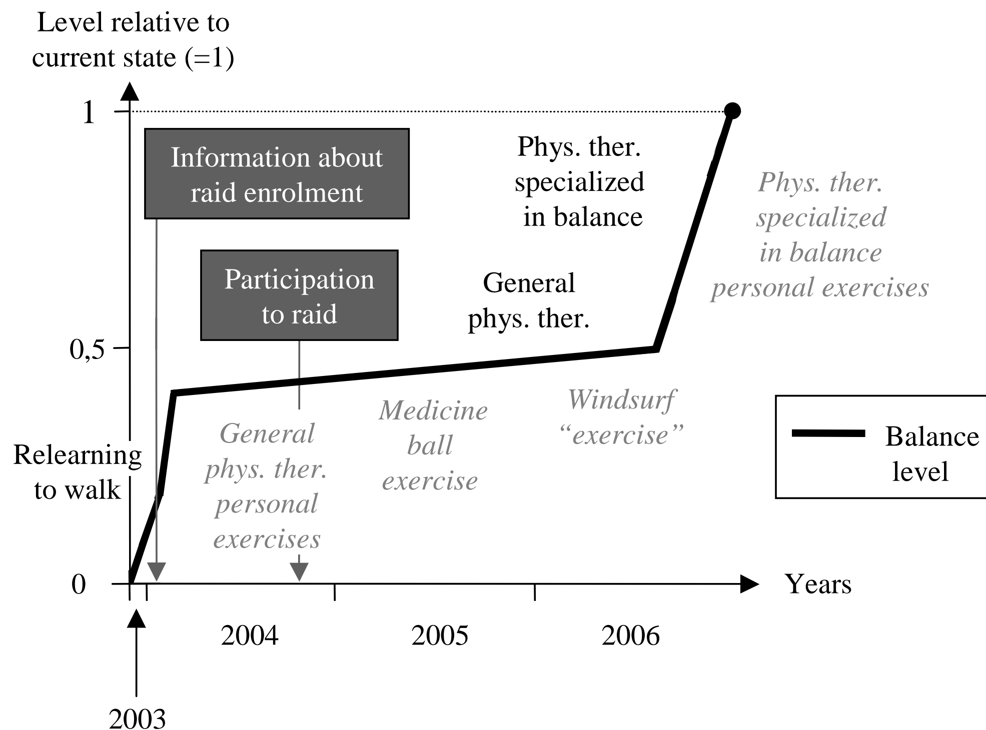
<table>
<tr><th colspan="2">INITIAL SITUATION</th><th>Balance almost absent</th></tr>
<tr><td colspan="2">Cause</td><td>Destruction of half the cerebellum owing to a high pressure in the cranium (the cerebellun is an organ in the cranium that manages coordination, therefore balance).</td></tr>
<tr><td rowspan="2">REHABILITATION MEANS</td><td>Ther. sessions 70%</td><td>1. General physical therapy in the rehabilitation center. It enabled me to relearn to walk.
2. General physical therapy private practice.
3. Physical therapy specialized in balance. Thanks to it, I completed my balance rehabilitation.</td></tr>
<tr><td>Personal 30%</td><td>1. Relearning to run and to do all motions.
(origin : enrollment by a close friend in a raid when I was in a coma)
2. Practice of physical therapy exercises :
- exercices on an "equilibrium board" replicated from that of the rehabilitation center
- exercices on a trampoline
3. Rehabilitation exercices with a "medicine ball" sent by my Dad.
4. Practice of exercices of physical therapy specialized in balance.
5. Windsurfing with a close friend.
6. Life in a non-protected enrionment, "real life".</td></tr>
<tr><td colspan="2">Duration</td><td>3 years</td></tr>
<tr><td colspan="2">FINAL SITUATION</td><td>Balance recovered</td></tr>
</table>

Initial situation

My balance was almost absent (but not entirely absent, I could for instance sit up straight).

I did not know if it was permanently almost entirely absent, or if I could recover it. Nobody told me. Since I never thought my loss of balance was irreparable, I did not ask anyone anything, and worked to regain it.
I moved in a wheelchair for a little less than 4 months, from the first half of November 2003 to the end of February 2004. An auxiliary nurse pushed me until the end of December 2006.

Rehabilitation curve



General considerations

My loss of balance was the major consequence of a coordination trouble that affected my whole body. This coordination trouble due to my damaged cerebellum could not be taken charge of by a rehabilitation in particular. It was solved :

- in part, thanks to my rehabilitations of equilibrium (balance capacity), speech and writing (relearning to write)
- in part naturally over the course of time, thanks to the motions generated by my other activities

Coordination rehabilitation took the form of the creation of new neurological connections in the still active part of the cerebellum.
After a trimester my coordination troubles almost only applied to my hands, but they were very marked during the first weeks.

During this period, I could not swallow certain drinks, such as milk. So, I had in December 2003 a “swallowing” medical appointment (I do not know the medical name of the appointment). I could not yet speak comprehensibly, so my Dad told the physicians what I garbled. I could use a fork at end-2005 (until then, I ate with a spoon). I could use a knife in mid-2006.

After I had relearned to walk, my poor equilibrium caused numerous problems, and did not enable me to do any activity marked by a strong continuous imbalance. Such an activity is for instance running or walking down a staircase without holding its ramp. Unbeknownst to me before the accident, the latter requires a fine control of balance I did mo longer have; therefore, a staircase without a ramp was insurmountable to me.
At the beginning, I walked like an old sea dog and a penguin combined, that is with my legs a little spread apart and my feet slightly outward-facing, in order to enlarge my “support polygon”. My improvement in balance enabled me to progressively draw my legs closer and to place my feet in the direction where I was going.
Until physical therapy specialized in balance, I was not able to turn my head without this movement resulting in a general unsteadiness.

Paramedical rehabilitation means

Note : for this specific rehabilitation and all others except that of speech, I write in months under each exercise the time of practice from my arrival in the rehabilitation center.

- **Physical therapy of the rehabilitation center**

  Months 2-13 - Daily half-hour session

After a few weeks in the rehabilitation center, I was carried on a stretcher to physical therapy sessions, for a reason I do not remember.
After a few days, the physical therapist I daily saw determined I could rehabilitate some equilibrium (he did this with high professional skills, but I do not know how). As a consequence, from the end of November 2003 he taught me to walk again.
For this relearning, I put my wheelchair between parallel bars and pulled myself, then supported myself with these bars and relearned to move my legs. At the beginning, I had to maintain my arms rigid, because I could not control my legs to support me.

I did many exercises to relearn to walk on a flat surface, then in February 2004 I relearned to walk on stairs. The physical therapist held me with a strap, but despite his support it was really a difficult exercise. During one of the sessions on stairs, I soaked my pants with urine, because my penal sheath had been torn off by my movements and I was too absorbed by the exercise to notice this.

On March 1st I could leave my wheelchair and walk, at the beginning with a cane. It helped me have better balance through the enlargement of my “support polygon”.
Balance improvement until I could walk had required 4 months. I had relearned to walk, but could not do any physical exercise that required a fine control of balance.

All the time I was in the rehabilitation center, I continued to daily execute rehabilitation exercises; they resulted in clear, but weak, balance improvements. It is only with physical therapy specialized in balance that I made again very important balance improvements.
When I left the rehabilitation center at the end of 2004, my balance was still poor. My movements were still a little jolty until the end of 2005, and were marked by stiffness until the end of my balance rehabilitation in November 2006.

- **General physical therapy (private practice)**

Months 27-29 - Weekly session

In spring 2006, more than a year after I had left the rehabilitation center, I was very unsatisfied with my balance improvements. So, I followed a series of sessions with a general physical therapist. I had not done so previously, for I was rehabilitating balance on my own; in addition, I was much too occupied with my other specific rehabilitations not to consider too important the time-cost surrounding sessions. Equilibrium improvements thanks to these general physical therapy sessions were very weak. I did not know anymore what I could do to significantly rehabilitate my balance.
Thankfully, my birthday present presented hereunder made me discover shortly afterward physical therapy specialized in balance.

- **Physical therapy specialized in balance (vestibular physical therapy)**

Months 31-35 - Weekly session

For my birthday, my sister invited me at the beginning of summer 2006 to the Vercors (a mountain range west of the Alps). Her birthday present was a week-end of sport activities with her, under the guidance of a middle-altitude guide. The wife of this guide is a physical therapist. I asked her questions, and she informed me of the existence of a physical therapy specialized in balance : vestibular physical therapy.

I found a physical therapist specialized in balance, and made appointments. Initially, I thought he was a kind of guru. I had this feeling, because at his practice I did not do any of the rehabilitation exercises I had done until then in physical therapy and the exercises I did were sometimes a little strange. The exercise I did most often was to look, standing upright in a dark room, at the points of light sent on a wall by a rotational perforated ball containing a lamp.
He questioned me about the part of the cerebellum the accident had damaged. I understood then that my balance problem had not been permanent because the localization of damages in the cerebellum enables the creation of new neurological connections.

In fact, this man was not at all a guru but a specialized physical therapist who specifically treated balance problems. He rehabilitated my equilibrium directly into my brain.
Thanks to him, the rehabilitation of my balance was swift and very consequent. I ended it between June and November 2006.

Personal rehabilitation means

- **Goal to participate in a raid**

  Month 3 : information about my enrollment in a raid. Month 10 : participation in the raid

It is not a personal rehabilitation means, but a concrete goal with a relatively close date that drove all my initial balance rehabilitation.
While I was in a coma, a close friend called Julien enrolled me in a raid (a raid is an amateur team sport event that combines orientation running, kayaking and mountain biking. It lasts from half a day to a week). At the beginning of January 2004, while I was in a wheelchair but relearning to walk, he cycled on a mountain bike to the rehabilitation center to inform me of my enrollment; the raid took place in October. My possible participation to this raid enormously motivated me to relearn to walk. So, during the physical therapy sessions that followed the announcement of my enrollment, I was hyper-concentrated and never rested.

Beyond this enrollment, Julien took direct charge of my balance rehabilitation through the physical activities he had me do.
At the beginning of April 2004, that is a month after I had relearned to walk, I went to his house and asked him to look at me while I would try to jog. I managed to, albeit very slowly, protected by roller knee pads and gloves. From this day onward, I regularly jogged with Julien, slowly at the beginning. From May 2004, I relearned with him to cycle. At the beginning, I fell often due to my still very weak balance. However, since I had a lot of protections (the hard plastic mountain bike downhill suit of Julien, helmet, gloves, knee-pads and elbow-pads), my falls were not a problem, and I relearned to cycle.

In mid-October, I was able to participate in the raid in which Julien had enrolled me. A friend, Minh Minh, formed with me the team necessary for the raid. I could do everything except the final orientation run in the forest, for which my balance was still insufficient.

- **Physical therapy of the rehabilitation center**

  Months 5-14 - 20 minutes daily

When I had relearned to walk, I redid alone in physical therapy the equilibrium rehabilitation exercises I had just practiced with my physical therapist.

- **Equilibrium board**

  Months 6-15 - Half an hour daily

I replicated the rehabilitation board of the rehabilitation center, and exercised on it every morning after my waking up.

- **Stability on trampoline**

  Months 16 - 26 - 15 minutes daily

Following my gleaning of information on equilibrium exercises, I thought a trampoline could be an efficient rehabilitation tool. So, I bought a small one in a sport shop. I exercised on it every day, holding on to a rope I had stretched.

- **Medicine ball**

  Months 30-35 - 15 minutes daily

I had to catch a medicine ball thrown by my Dad, without moving anything other than my torso. The weight of this ball had me make equilibrium efforts.

- **Personal vestibular physical therapy exercises**

  Months 32-36 - Half an hour daily

When I began vestibular physical therapy, I asked the physical therapist the rehabilitation exercises I could practice alone. He answered he would be pleased to indicate such exercises to me, but I needed a specific board to do them. So, I went to a shop for physical therapists and bought the model of board he had described. Then, I exercised on it every morning after waking up.
The outgoing vestibular physical therapy check-up indicated a 100% rehabilitation of balance. I thought this value applied only to balance rehabilitation patients, not to all people. In consequence, I went on for a month doing personal exercises.

- **Windsurfing with a close friend**

  Month 33 - Daily practice for two weeks

A little before summer 2006, I sent an email to all my friends to ask whether I could go on holiday with one of them. Actually, I felt the need to go on holiday with a friend, so as to be distracted from all my thoughts revolving around rehabilitation. In doing so, I would de-saturate from it.
A close friend, Francois-Regis, suggested I go on holiday with him. He usually windsurfs on holiday, but put forward a hike in order to spare my weak financial means. However, I chose windsurfing, for it seemed a very good way to exercise balance through stability efforts.

It was, and I spent much time in the water. In order to minimize the number of falls, I had to navigate under a light wind, not to fill the sail fully, on calm water, and to hold the mast absolutely upright.

- **Life in a non-protected environment, “real life”**

I did not adapt my lifestyle in any way to my weak balance.
My opposition to any adaptation admittedly was not without difficulties, but led me to do everything I could to solve them rather than to try to dodge them.

The search to solve each physical problem, rather than the attempt to avoid its negative consequences, resulted in each of my specific rehabilitations.
It reflected my refusal to adapt to a situation I wanted only temporary. So, each difficulty led me to increase my reflection and my efforts on my body.

Physical therapy specialized in balance enabled me to finish to rehabilitate my balance as soon as November 2006.
From then on, I had only 3 simultaneous specific rehabilitations : speech, writing (relearning to write) and intellect.

Final situation

Balance recovered.

2. Speech[2]

Rehabilitation thanks to therapy sessions : 35% - of which, at the center, 8% -
Personal rehabilitation : 65%

Summary

<table>
<tr><th colspan="2">INITIAL SITUATION</th><th>Speech almost incomprehensible
Nil ability to communicate</th></tr>
<tr><td colspan="2">Causes</td><td>1. Tongue sheared, then sewn back.
2. Lower jaw completely broken, then reformed.
3. Cerebral Vasculary Accident (CVA)
4. Damage to the cerebellum, which modulates speech.</td></tr>
<tr><td rowspan="2">REHABILITATION MEANS</td><td>Ther. sessions
35%</td><td>Sessions with speech therapists I, II and III :
- elements regarding my rehabilitation case
- exercices</td></tr>
<tr><td>Personal
65%</td><td>1. Flexing tongue while watching movies.
2. Writing my own speech rehabilitation words and phrases.
3. Reading books, magazines and my bedside book, out loud.
4. Singing karaoke songs.
5. Using for a period the internal house function of the house phone for speechwork sessions.

"Pure speech rehabilitation" rehabilitation mode

6. Reading theatre plays out loud.
➔ Relearning many tones and several articulations.
7. Reading poems o.l..
➔ Relearning many speech sounds and most articulations.
8. Reading t. twisters, and sentences with the still missing sp. sounds, out loud.
➔ Completing speech sounds relearning.
9. "Controlled" reading of texts o.l..
➔ Regaining complete control of speech amplitude.
10. Reading homophone verses o.l..
➔ Working finely on speech sounds expression.
11. Reading complex phonetic sentences o.l..
➔ Working finely on artuculations expression.
12. Reading speeches o.l..
➔ Completing control of breath use, and regaining "normal" speech.</td></tr>
<tr><td colspan="2">Duration</td><td>4 years 6 months</td></tr>
<tr><td colspan="2">FINAL SITUATION</td><td>"Normal" speech</td></tr>
</table>

[2] Appendix B presents the material used for the final phase of my speech rehabilitation that is on the passive website of the OYR! project

<u>Initial situation</u>

My speech could scarcely be understood. It was :

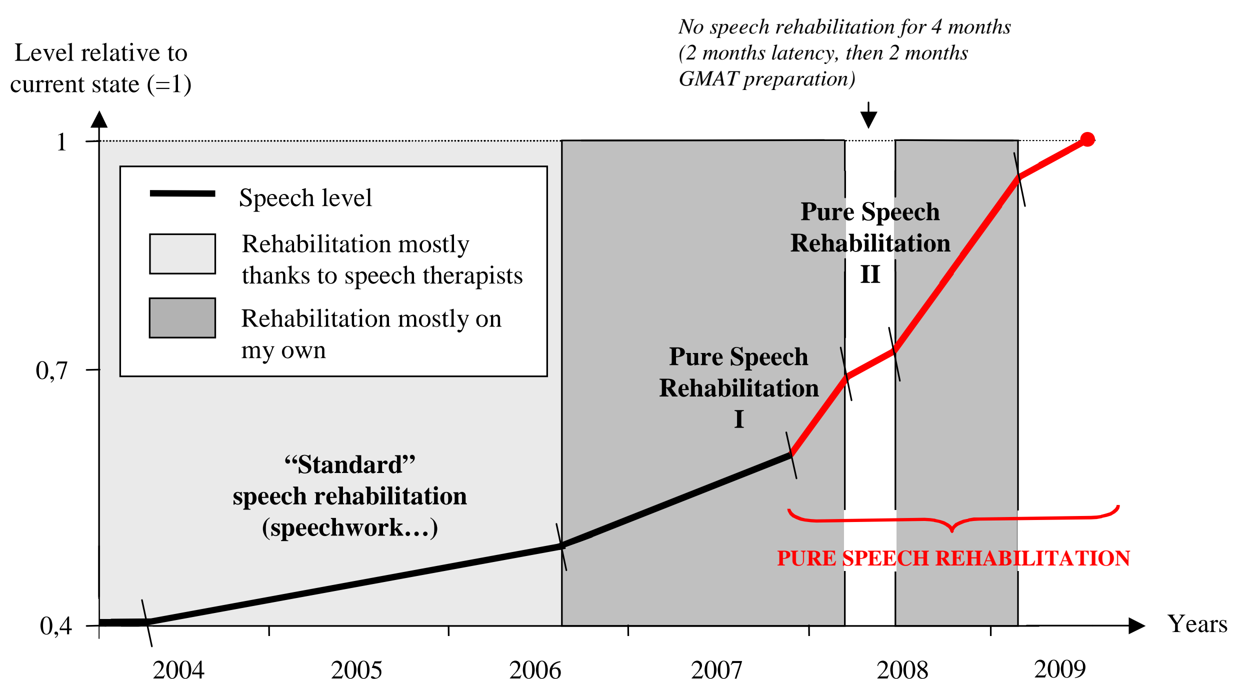
- <u>filled with holes</u>, because I had “unlearned” many speech sounds
- <u>weakly articulated</u>, because I no longer knew many articulations (which are speech sounds combinations within or between words)
- <u>completely monotone (“unitonal”)</u>, because I could not express tones
- <u>of sometimes irregular amplitude</u> (volume and aptitude to set tones)
- <u>very slow</u>
- “<u>chopped</u>”, because I had to breathe every few words

Four causes explain this state of speech :

1. Moderate CVA, resulting in dysarthria
2. Damaged cerebellum
3. Damaged tongue
4. Damaged jaws

I specify “moderate” for my CVA because I visited, to help him and to motivate him for his rehabilitation, the father of a close friend who had also recently had a CVA. I then realized that my speech problems were much less serious than his : I managed to speak although I had to struggle to make myself understood, but he had to completely relearn to speak, he had to learn how to pronounce each single speech sound again.

<u>Rehabilitation curve</u>



The rehabilitation curve strongly rises only with my own handling of rehabilitation without a speech therapist. This handling alone took the form of "Pure Speech Rehabilitation".
The curve does not show progressively diminishing returns. On the contrary, returns strongly increase over time, a phenomenon I clearly felt.
This profile surprised me, then I found possible explanations :

- Speech rehabilitation was autonomous only at approximately its 5/8th. Once the speech therapists had taught me its principles, autonomous handling of rehabilitation was of much higher intensity, so more efficient, than when I could fall back on them.
- The initially very heavy rehabilitation work became lighter over time, so the "effective rehabilitation/rehabilitation effort" ratio increased.
- I needed as a patient to follow a long rehabilitation "learning curve", before I could devise very efficient exercises.

My speech goes on markedly improving 9 months after my speech rehabilitation ended.
This improvement results from the very strong latency effect detailed on page 89.

General considerations

I try here to present clearly my speech rehabilitation work. This presentation may conceal I rehabilitated speech in "deep fog" and complete uncertainty.

Rehabilitation causes : speech problems originating in injuries in the cranium, and in other physical injuries

- **Speech problems originating in injuries in the cranium : dysarthria (neurological speech problem) due to the damaged brain, and hurt cerebellum**

  I solved them thanks to "Pure Speech Rehabilitation", during the second phase of which I "trimmed" then "polished" my speech (these terms refer to the parallel presented on page 94 between my rehabilitation from dysarthria and the creation of a distinctive necklace).

- **Speech problems originating in other physical injuries**

  Their impact on my speech was lesser than that caused by injuries in the cranium, but important. The scarred (and therefore stiffened) tongue, the slanted palate and the lack of teeth resulted in severe speech impediments.

Conceptualization and practice

Regarding conceptualization, I analyzed numerous speech problems and worked out personal exercises to treat them.
Regarding practice, I executed exercises in places perhaps a little unusual for speech rehabilitation such as in front of the TV or the computer, in a W.C.... or during my daily travels.
As far as daily travels are concerned, I needed during the first stage of my rehabilitation to flex my tongue; this task was not loud or technical. So, I executed tongue flexing exercises whenever I moved : taking the suburban train or the underground, and walking in the street. Since my mouth was closed during these exercises (pressures against the palate, horizontal movements...), nobody around me could notice them.

Rehabilitation time length

My rehabilitation was very slow, because it was very vast. At its term, I did not want to show I had rehabilitated my speech.
In that way, the person I would talk to would focus on my message, not on my speech.

Complete non-representativeness of close ones for the evaluation of speech level

Members of my family and friends never referred negatively to my speech.
That they did so is very good, because I preferred they do not highlight my poor elocution (oral delivery). **However, I had to realize that these persons are <u>not at all representative</u> for the comprehension of my speech. The goal of its rehabilitation was to live again in society, not to stay in the rehabilitation field**.
These persons told me things such as “You have a 90% level” or “Some people speak worse, such as people who have a lisp”.

Thankfully, the friend of a close friend and a friend told me : “If you work for my company, you will have a seriously handicapped person job” and “If you talk like this in a job interview, you will be torn to pieces”.
<u>I sincerely thank these persons for having told me the truth, for having made my speech handicap appear so clearly</u>.

Paramedical rehabilitation means

I had speechwork sessions with 3 speech therapists :

- "Speech therapist I", a speech therapist in the rehabilitation center.
- "Speech therapist II", a liberal speech therapist who gave me sessions at the home of my parents.
- "Speech therapist III", a Parisian liberal speech therapist.

Personal rehabilitation means

Speech rehabilitation is the specific rehabilitation where I invested myself most.
I detail hereunder how I treated it so some of its elements may possibly be used by you.

I solved my speech rehabilitation case. For yours, please ask your speech therapist if any idea presented in this section is worthwhile for your rehabilitation. She will indicate whether it is the case.

Speech rehabilitation is very tough. Do not spend time and energy on rehabilitation exercises insufficiently efficient for you. Your following by a speech therapist will prevent this from happening.

My rehabilitation was made possible by a constant evolution of it. Exercises were at first "generic", then increasingly "specific".

Rehabilitation needs

The table on page 80 that summarizes my rehabilitation details 7 rehabilitation needs (➔ "rehabilitation focus"). However, 2 needs caused 70% of the volume of my rehabilitation :

- **Need n°2 to relearn certain speech sounds.**
- **Need n°3 to relearn certain articulations.**

Needs n°6 and n°7 resulted from them. Need n°4, the regaining of control on speech amplitude so that I can speak with an even tone, resulted from my damaged cerebellum. Need n°5, the necessity to relearn to express any tone (joy, surprise...), was also due to my damaged cerebellum. Need n°1, tongue-flexing, was of major importance during the initial 2.5 years of rehabilitation. However, my rehabilitation efforts made this problem decrease then disappear.

Speech rehabilitation structure

1. **Period of basic rehabilitation**

   This period comprises tongue flexing, part of the relearning of speech sounds and articulations, part of the regaining of speech amplitude control, and part of the relearning of the expression of tones.

   It numbers 3 phases :

   - *Standard Speech Rehabilitation I* - 9 months
   - *Standard Speech Rehabilitation II* - 27 months
   - *Standard Speech Rehabilitation III* - 9 months

   I personally handled my rehabilitation, but I could never have carried it out without the speech therapists in charge of me.

2. **Period of fine rehabilitation : "Pure Speech Rehabilitation", ending with the "trimming" and "polishing" of my speech**

   I carried out mostly on my own this second period of rehabilitation, but I executed the first step of *Pure Speech Rehabilitation II* in great part thanks to speech therapists II then III.

   It numbers 2 phases :

   - *Pure Speech Rehabilitation I* - 3,5 months
   - *Pure Speech Rehabilitation II* - 6,5 months

     Pure Speech Rehabilitation II was executed in 2 steps :

     - ➢ First step
     - ➢ Second step

       The second step was executed in 2 parts :

       - ✓ First part
       - ✓ Second part

The table overleaf summarizes my rehabilitation.

Speech rehabilitation summary

	Basics rehabilitation			*Fine rehabilitation*	
Rehabilitation phase number and name	1 STANDARD SPEECH REHBAILITATION I	2 STANDARD SPEECH REHBAILITATION II	3 STANDARD SPEECH REHBAILITATION III	4 PURE SPEECH REHABILITATION I	5 PURE SPEECH REHABILITATION II
Living place	Rehabilitation center Months 1-9	Home of my parents Months 10-36	Paris Months 37-45	Paris Months 46-48.5	Home of my parents Months 48.5-54
Duration (months)	9	27	9	3.5	6.5
Daily rhythm	10h	3-5h	3-5h	10h	10h / 4 months then 6h40 / 2.5 months
Rehabilitation focus 1	Tongue flexing	Tongue flexing	Tongue flexing	Good tongue flexibility	Good tongue flexibility
Rehabilitation focus 2	Releaning speech sounds	Releaning speech sounds	Releaning speech sounds	Releaning speech sounds	Releaning speech sounds
Rehabilitation focus 3		Releaning articulations	Releaning articulations	Releaning articulations	Releaning articulations
Rehabilitation focus 4		Controlling amplitude	Controlling amplitude	Controlling amplitude	Controlling amplitude
Rehabilitation focus 5			Releanning tones	Releanning tones	Releanning tones
Rehabilitation focus 6				Releaning speech speed	Releaning speech speed
Rehabilitation focus 7					**Adv. relean. of sp. sounds**
Paramedical following	Speech therapists I then II, 2 sessions a week	Speech therapist II, 2 sessions a week	Autonomous work	Autonomous work	First month sp. ther. II, 4 following months sp. ther. III, 1.5 last month autonomous work
Major rehabilitation consequence	**Tongue part. flexibilised**	**Relearning some sounds/articulations**	**Relearning some tones**	**Relearning many tones and breath mgt. in speech**	**Regaining "normal" speech**

2.1. PRINCIPLES

a. Quality-quantity couple

Quality

The quality of rehabilitation exercises was maintained as high as possible by way of their continuous adaptation :

- First 2 years : essentially tongue flexing, then partial relearning of speech sounds and articulations.
- Following 1.5 year : essentially partial relearning of speech sounds and articulations, and partial relearning of tones.
- Last year : final relearning of speech sounds and articulations, and relearning :
  - modulation of speech amplitude, partially relearned from year 2
  - tones, partially relearned from year 3
  - breath management in speech
  - fine and very fine expression of speech (speech sounds and articulations)
  - "normal" speech rhythm

  The "Pure Speech Rehabilitation" rehabilitation mode detailed below made this last year particularly efficient.

I wrote an ever-increasing part of the words then sentences, so they :

- correspond exactly to my rehabilitation case
- be the most efficient possible
- motivate me (I tried to make them rather funny)

At the beginning, I spoke too poorly to pronounce anything other than very simple expressions. For instance, for the relearning of the "ch" speech sound : "Le monchu va à Chamonix" (*The urban tourist goes to Chamonix).*

However, before I executed any new rehabilitation exercise, I always asked my speech therapist what he thought about it. I did this because he had followed specialized studies to learn speech, and practiced speech rehabilitation as a professional. As for myself, I thought about my rehabilitation case, had rehabilitation ideas, but did not know their value for the improvement of my speech.

Quantity

Quantity never was an absolute quantity, but was the maximum quantity repeatable daily over a long time period.
It should not be a sort of "record", completely useless for rehabilitation, and even harmful to it due to its energy cost.

I increased the rehabilitation time length advised. For instance, Speech therapist I advised me to exercise 20 minutes per day, but I exercised 10 hours in year 1 and part of year 5, so 30 times more.
However, a presentation of my rehabilitation focusing on quantity would be entirely inadequate, for quantity was just the expression of quality. I was the one handling my speech rehabilitation and was responsible for its quality; speech therapists were specialized consultants to whom I had recourse.

b. Principles and examples of personal exercises

Rehabilitation exercises derived from my paramedical following

Personal exercises were *in no way* substituted for those my speech therapist had given me; as a matter of fact, I would have been stupid to replace the work of a specialist who was helping me solve my rehabilitation case !
During the first 3.5 years, my speechwork exercises were most often derived from those of a speech therapist. They had one of 3 purposes :

1. adapting an exercise as well as possible to my rehabilitation case
2. enhancing it
3. doing other than it

Other rehabilitation exercises

- **Watching movies to enable tongue flexing**.

  Reasons for the exercise

  The scar across my tongue rigidified it.
  So, to flex it was necessary. Flexing exercises were for instance done by applying pressure on my tongue with a little spoon. They were very tedious.

  Exercise

  To escape boredom that would have made me give up, I watched movies during which I flexed my tongue.
  I subscribed to an Internet video club, and for 6 months saw between 2 and 3 movies a day (during the other rehabilitation hours, I did exercises to relearn speech sounds and articulations).

- **Reading my bedside book and various books, magazines and articles during the rest of the day, out loud**.

  It made me work articulations.

- **Singing karaoke songs**.

  They were **VERY** useful, bringing :

  - a strong increase in **speech strength**, because I sang the songs rarely melodiously but invariably at the top of my voice
  - a very consequent **articulatory work**, for I had to pronounce all words of the songs
  - an increase in **speech speed**, since I had to follow the speech rhythm of the singer; this task was particularly difficult when the rhythm was quick

- **Reading complete theatre plays out loud** (origin : pages of plays given by Speech therapist II).

  It made me relearn a lot of articulations and many tones.

I also had more minor rehabilitation ideas, such as the conduct of rehabilitation sessions over the house phone. To do so, my speech therapist and I were each with one of the 2 handsets in different rooms, and we used the internal speech function of the home telephone to speak.
Since the sound spectrum transmitted by a telephone handset is narrower than the one perceived in a face-to-face meeting, I had to concentrate on the clarity of my speech.

c. Making personal exercises fun or interesting

The execution of rehabilitation exercises for hours would have been too boring and tiring if I had spent my time only rehabilitating. As a consequence :

- Watching movies while flexing my tongue enabled me to laugh or to learn while doing exercises. Never would I have been able to spend hours of flexing exercises without being absorbed by movies I liked.

- Reading books out loud was essentially reading to laugh or to learn. In this way, the primary objective of rehabilitation almost seemed a secondary effect.

- Karaoke (on-line free songs) enabled me to jabber at the top of my voice songs I like, such as singles from the early albums of *Placebo*. I also went through all the pop, rock or heavy metal songs I knew the melody of : songs from *Renaud, Johnny Halliday, Abba, Muse, Metallica*... I really enjoyed singing particularly beautiful music pieces, such as certain songs from *Jacques Brel*.

- Reading theatre plays out loud made me work articulations while laughing a lot; I laughed for I used almost only comedies.
  I used comedies because reading a play out loud during hours in a row is easy only if it is funny; regarding comedies, I was sometimes actually looking forward to reading them.

2.2. TASKS

Other than tongue flexing, rehabilitation tasks belong to one of 4 categories :

a. Relearning certain speech sounds

This task lasted all my rehabilitation.

I had to relearn certain speech sounds the CVA had made me "unlearn". They comprised :

- numerous consonants : the whole of "fricative consonants" (*f, v, s, z, ch, j*) and part of "nasal consonants" (*m*, *n*)
- some vowels (*i, o* and the nasalized *o, on*)
- certain combinations of sounds (in particular *st* and *gn*)

Operations on my mouth and artificial teeth were the precondition to my relearning of a large part of speech sounds.

The state of the mouth plays a very important role in speech, for the following reasons :

- Teeth : teeth, in particular upper teeth, modulate the airflow of speech.
- Palate : its form determines in part the quality of speech sounds.

For a long time, the state of my mouth did not allow me to pronounce a large number of speech sounds :

Teeth

Until May 2007, that is almost 4 years after the accident, I did not have artificial teeth, which play a major role for speech modulation.

Palate

My mouth presents specificities which modify a little the form of my palate.
I thought this slant would result in irreparable speech problems. However, Speech therapist II told me my palate made certain speech sounds only temporarily poor. A phenomenon of adaptation would manifest itself, after which I would be able to pronounce these speech sounds well.

Adaptation took time, but was complete.
Adaptation played a very important role in my speech rehabilitation.
I had reasoned using constant parameters, but my body in rehabilitation did not have a constant field.
Adaptation is an additional explanation for the rising slope of the rehabilitation curve.

b. Relearning certain articulations

This task lasted all my rehabilitation.

Owing to my articulatory problems, for a long time I was under the impression my speech was surrounded by a "halo" that did not allow it to be clearly perceived; this "halo" was because I no longer could pronounce many articulations.
Thus, I could not pronounce without having to repeat myself, several times at the beginning, words of more than three syllables such as "*aspirateur*" (vacuum cleaner) or "*macro-économique*" (macroeconomic).

I relearned most articulations and speech sounds thanks to :

- standard speechwork exercises
- expression lists I wrote (for speech sounds only)
- the reading of all my books and magazines out loud
- karaoke songs
- "Pure Speech Rehabilitation"

c. Quickening speech

This task lasted until the end of *Pure Speech Rehabilitation I*.

That I be able to hold a conversation required that I quicken my speech while keeping it clear (I would slow a little the way I spoke during *Pure Speech Rehabilitation II* by separating words with spaces, short silences).
Two means enabled me to speak more quickly:

- **karaoke songs**
- **"Pure Speech Rehabilitation"**

d. Fine speech relearning thanks to *Pure Speech Rehabilitation I*

This task lasted 3.5 months.

Reason for "Pure Speech Rehabilitation"

In November 2006 balance rehabilitation ended. During fall 2007, relearning to write and intellectual rehabilitation were well under way. However, the level of my speech was still very unsatisfactory.
Therefore, I decided to invest myself completely in speech rehabilitation, and to devise a rehabilitation mode specifically suited to my rehabilitation case.

I call this rehabilitation mode "Pure Speech Rehabilitation" and detail it on the next page. Its *Pure Speech Rehabilitation I* initial phase lasted from December 2007 to March 2008. I thought that this "Pure Speech Rehabilitation" phase would allow me to finish to rehabilitate, but it was not the case. As a result, from August 2008 I carried out a second phase of pure rehabilitation, *Pure Speech Rehabilitation II*.

Living conditions

"Pure Speech Rehabilitation" forced me to adopt a rigorous rehabilitation regimen, indispensable in my rehabilitation case.

During *Pure Speech Rehabilitation I*, time pressure meant I could neither wash myself more often than once every two days, nor do cooking. Because of this, I essentially ate a liquid yogurt in the morning, cheese and a fruit for lunch and dehydrated soup in the evening. I rested from rehabilitation on Sunday and Wednesday, days during which I went jogging to relax. I did not go out of my small flat from Sunday evening to Tuesday evening, and from Wednesday evening to Saturday evening.
I went to sleep at 21h30 and woke up at 5h00. I forced myself to go to bed early every day, in order to :

- rest
- enable the latency effects detailed below to occur

Rehabilitation work

At the very beginning of this phase, I went to a bookstore specialized in theater where I bought approximately 30 plays. During the following months, I read them out loud.
While reading, I highlighted the words, expressions and sentences most difficult to articulate; every 2 hours, I stopped reading and pronounced them 20 to 200 times.

Pure Speech Rehabilitation I had a major effect I did not expect : it enabled me to speak much less "choppily", hence more quickly.
Before it, I had to breathe every few words, due to my misuse of air from my breathing. After it, speech became much less "choppy", because I had forced myself to pronounce longer word chains; so, I had much improved articulation capacity under time pressure, hence speech speed.

"PURE SPEECH REHABILITATION"[3]

Rehabilitational efficiency - computational parameters :

\+ 2 times more speech rehabilitation in 10 months plus latency period than during the 3.75 previous years.

\- Higher personal involvement due to my autonomous handling and my need to reach the planned rehabilitation goal, lighter rehabilitation weight, experience and physical adaptation.

➔ **5 times greater rehabilitational efficiency.**

Characteristics

- Principle : To spot my speech problems and to try to solve them all.
  To do almost only speech rehabilitation, to think almost only about it.
- Work quantity : 206 rehabilitation days over 10 months. Daily rehabilitation work of 10h for 75% of this time length, then of 6.5h for the remaining 25%.
- Elements to be attentive to : **Thickening**, and **rehabilitatory improvement following latency**.

[3] Appendix C presents my work for speech rehabilitation, and in particular "Pure Speech Rehabilitation" : documents produced and roadmaps.

Thickening

As soon as I began, I noticed a "thickening" of my mouth that made my speech less clear after approximately 3 hours of rehabilitation.
A moderately decreasing return of my rehabilitation efforts was not really a problem. Indeed, I was not looking for an ideal maximum, but for the maximal rehabilitatory effect given my medical case. Thus, for 10 hours of work, an equivalent of 8 to 9 hours of rehabilitation was acceptable.

However, to limit the thickening phenomenon, I divided the quantity of exercises in 3 sequences of 3 hours 20 minutes, separated by 2 rest periods of 2 hours.

Rehabilitatory improvement following latency

A large part of improvements only happened after a latency period. The most efficient rehabilitation demanded a rest after work of an extreme minimum of a good night, a minimum of one day and an ideal of 2 days.
In consequence, I separated by 1 or 2 days of rest rehabilitation groups of :

- 2 or 3 consecutive days, during *Pure Speech Rehabilitation I*
- 3 to 5 consecutive days, during *Pure Speech Rehabilitation II*

While speech therapist II reads the part of this book relative to speech rehabilitation, I speak almost well, whereas at the end of rehabilitation I spoke only correctly.
I do not know how to medically explain this continued improvement, but it keeps happening until I write these lines and nothing indicates it will stop.

d. Very fine speech relearning, "trimming" then "polishing" of my speech, thanks to *Pure Speech Rehabilitation II*

This task lasted 6.5 months.

My friends were beginning to ask me "Sorry ?". This question was a very positive sign for me : I no longer spoke too badly for them to feel embarrassed to ask it. However, it made clear further speech improvements were necessary.
On August 4th 2008, I went to an examination center to take the GMAT (the GMAT is an international examination necessary to apply to an MBA - Master in Business Administration -, which consists in managerial studies after a few years of professional life). The person receiving candidates did not understand my name. This lack of comprehension troubled me enormously.

So, I decided to follow a new phase of "Pure Speech Rehabilitation", which I wanted definitive. I carried out a *Pure Speech Rehabilitation II* phase from August 7th 2008 to February 19th 2009; during this phase, I very markedly increased the reflection on my rehabilitation case.

Living conditions

I lived at the home of my parents. Accordingly, I did not have to care about numerous details of living conditions, and could concentrate completely on rehabilitation.
The intensity of *Pure Speech Rehabilitation II* was comparable to the preparation of the entry examination of a "grande école" (a French specialized school for higher education).
However, I was not trying to get into a grande école, but into my life. So, my focalization on the goal was much greater.

Rehabilitation framework

Due to my improved speech, I had to be more qualitative during this phase than before. So, I began by contacting in August 2008 Speech therapist II to have the advice of a rehabilitation professional.
He told me he did not really see improvements I could do : he had difficulties to understand me at the beginning of sessions 3 years earlier, and he thought I had much improved. Then, he made a decision full of professionalism and humility : he told me another speech therapist would evaluate my rehabilitation case differently from him, and he gave me the contact details of Speech therapist III.
From September 2008, I worked with him. I **WANTED** to speak better, so I was in a state of high receptivity to his messages. Consequently, I got from sessions with him much more than I had learned until then from speechwork sessions.

Rehabilitation guidelines

They were :

- To perceive my speech as a third party, so as to prevent me from guessing a word through my partial comprehension of it.
- To pronounce a whole sentence in a continuous manner, to regain speech fluidity.
- To "dynamize" speech, to go from the rather flat oral mode of reading out loud to the more spontaneous oral mode of talking.

2.3. *PURE SPEECH REHABILITATION II*

First step - 5 months - August to December 2008.

Its aim was to relearn all speech sounds and articulations.
So, I read out :

- *Poems, upon advice from Speech therapist II, in order to regain a fine mastery of speech sounds and articulations.*

  The short length of a poem made me be attentive to each speech sound and articulation. Therefore, while reading it, rehabilitation intensity was very high. Until *Pure Speech Rehabilitation II*, I spoke too poorly to be able to use poems to rehabilitate. Henceforth, I spoke well enough.
  At first, I aimed at pronouncing correctly all speech sounds and articulations. Then, I aimed at refining their pronunciation.

  This task enabled me to relearn many speech sounds and several articulations.

- *Tongue-twisters and sentences I wrote, in order to relearn the rare speech sounds still missing.*

  Missing speech sounds were principally "j" and "ch".
  I relearned them by pronouncing tongue-twisters and sentences I had written, 20 to 200 times.
  An example of the latter is : "*La chatte chafouine en chaussettes chamarrées chaloupe lachivement pour chéduire le chihuahua*" (The foxy cat in richly ornamented socks waddles sensually to seduce the Chihuahua)

  I noticed many sounds of these sentences did not necessitate rehabilitation effort. As a consequence, I shortened most words, so as to do more speech rehabilitation in the same time.
  Hence, the previous sentence became : "*La cha- chaf- en chau- cha- chal- lach- pour ché- le chi-*".

  This task enabled me to complete speech sounds relearning.

- *Various texts, upon which I forced myself to control the modulation of my speech.*

  The trouble of the control of speech amplitude had markedly decreased, but still affected me. It resulted in a speech usually “flat” due to the lack of tones, but sometimes much too strong or shrill.
  So, I forced myself to read texts out loud with an even voice.

  This task enabled me to regain a complete control of speech amplitude.

Second step - 1.5 months - January to mid-February 2009

My speech was very irregular, marked by certain speech sounds and articulations I had relearned but sometimes insisted on too little or too much.
The first step of *Pure Speech Rehabilitation II* had allowed me to relearn all speech sounds and almost all articulations. This second step aimed at relearning all still missing articulations, and at automating speech and making it finer.

a. First part - 1 month

Its goal was to “trim” my speech.
So, I read out loud :

- *Homophone verses, for advanced refining of speech sounds.*

  I perceived that my speech problems no longer had to do with missing speech sounds, but with their insufficient fine mastery.
  I pronounced similarly every given speech sound. Yet, a speech sound is not pronounced exactly the same according to the letters that surround it.

  I searched the Internet for a means to refine my pronunciation of speech sounds, and found holorimes, French homophone verses. These verses are made of 2 halves, each composed with the same homophone syllables linked differently.
  Exemples : “*Dans cet antre, lassés de jeûner au palais, dansaient, entrelacés, 2 généraux pas laids*” (In this den, bored fasting at the palace, danced intertwined 2 not ugly generals), or : “*À Lesbos, à Tyr, l'Évangile est appris; ah, laisse, beau satyre, l'Ève en gilet t'a pris !" (*In Lesbos, in Tyr, the Gospel is learned; ah, leave aside, handsome satyr, the Eve in a cardigan kidnapped you !).

  This task enabled me to work finely on speech sounds expression.

- *Sentences difficult to comprehend* ***phonetically****, for advanced refining of articulations.*

  I searched the Internet for a way to refine my articulatory ability, and found the "difficult sentences" of a Belgian spelling club.
  These sentences were termed difficult, because they comprised very little known "rare" words. This was perfect for the role I intended for them, for it is impossible to use the context to guess them from only part of their sounds; their whole pronunciation has to be of good quality to make them intelligible.

  I read approximately 100 sentences out loud 20 times, and recorded each of them with a small recorder. What mattered during reading was not the writing of a sentence, but its **sounds** ("speech sounds"). Thereafter, I asked my Dad to listen to the recording and to tell me his phonetic comprehension of the sentences. I noted the words he had not comprehended and worked again their sentences the following days until his comprehension of them was good.

  To have to make sentences phonetically comprehensible by a third party led to my very high concentration on the pronunciation of articulations.

  This task enabled me to work finely on articulations expression.

b. Second part - 3 weeks

My speech was still "coarse"; the goal of this part was to "polish" it.
This advanced rehabilitation should make my speech "normal" again.

I no longer had problems with speech sounds or articulations, or with a speech sound pronounced with not enough or too much strength because I had not yet automated its pronunciation.
However, my speech was not "normal", and I wanted a rehabilitation task that would make it so. Consequently, I read speeches out loud, paying attention that my speech be particularly clear : separated words, varied tone, even rhythm...
These speeches comprised for instance :

- The speech held at the Panthéon (the French national repository for great human beings) for the transfer of the ashes of Jean Moulin (the head of French Resistance during WWII).
- The very famous speech against racism of Martin Luther King, "I have a dream".

This task enabled me to complete the control of breath use, and to regain "normal" speech.

Pure Speech Rehabilitation II **ended on February 19th 2009.**
This date marks the end of my speech rehabilitation.

THIS DATE MARKS THE END OF ALL MY REHABILITATION.

2.4. PARALLEL BETWEEN MY REHABILITATION FROM DYSARTHRIA AND THE CREATION OF A NECKLACE

After the end of my rehabilitation, I depicted to myself the speech rehabilitation work I had done as similar to the work of a jeweler who creates a necklace without any external supply. This necklace is made of several rows of multicolored beads, and its motives are separated by little silver cylinders :

- **Jeweler** : designing the necklace on a piece of paper
  - ➔ **Me** : I first had to figure out how to pronounce many speech sounds and articulations.
- **J.** : obtaining the string by weaving several threads, then makes rows with it to form the frame of the necklace.
  - ➔ **M.** : I “shortened” my speech, controlled it, and relearned tones.
- **J.** : Devising a mold for each pearl, pouring molten glass to make it then trimming it.
  - ➔ **M.** : I followed several rehabilitation stages to get clear speech sounds and words then the final product : clear sentences.
- **J.** : Separating beads by little silver cylinders to make patterns.
  - ➔ **M.** : I inserted the controlled interstices of breath between speech sounds to make clear the group of words of a sentence.
- **J.** : Polishing the necklace to sell it to clients.
  - ➔ **M.** : I rendered my speech “normal” to become able to speak with persons I am not close to.

The parallel is drawn at the end of this underpart.

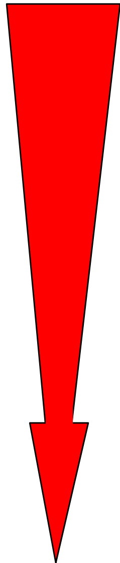
The time length of my speech rehabilitation is not at all representative of the length of speech rehabilitation from dysarthria. Dysarthria was not the sole cause of my poor speech, and not my only rehabilitation.
If the following elements were subtracted, my speech rehabilitation would have been greatly shortened :

- Tongue scarred - 6 months less.
- Damaged cerebellum - 7 months less.
- Multiplicity of my 4 specific rehabilitations - 7 months less.
- Missing teeth - 8 months less.
- Practice from the onset of “Pure Speech Rehabilitation” - 12 months less.

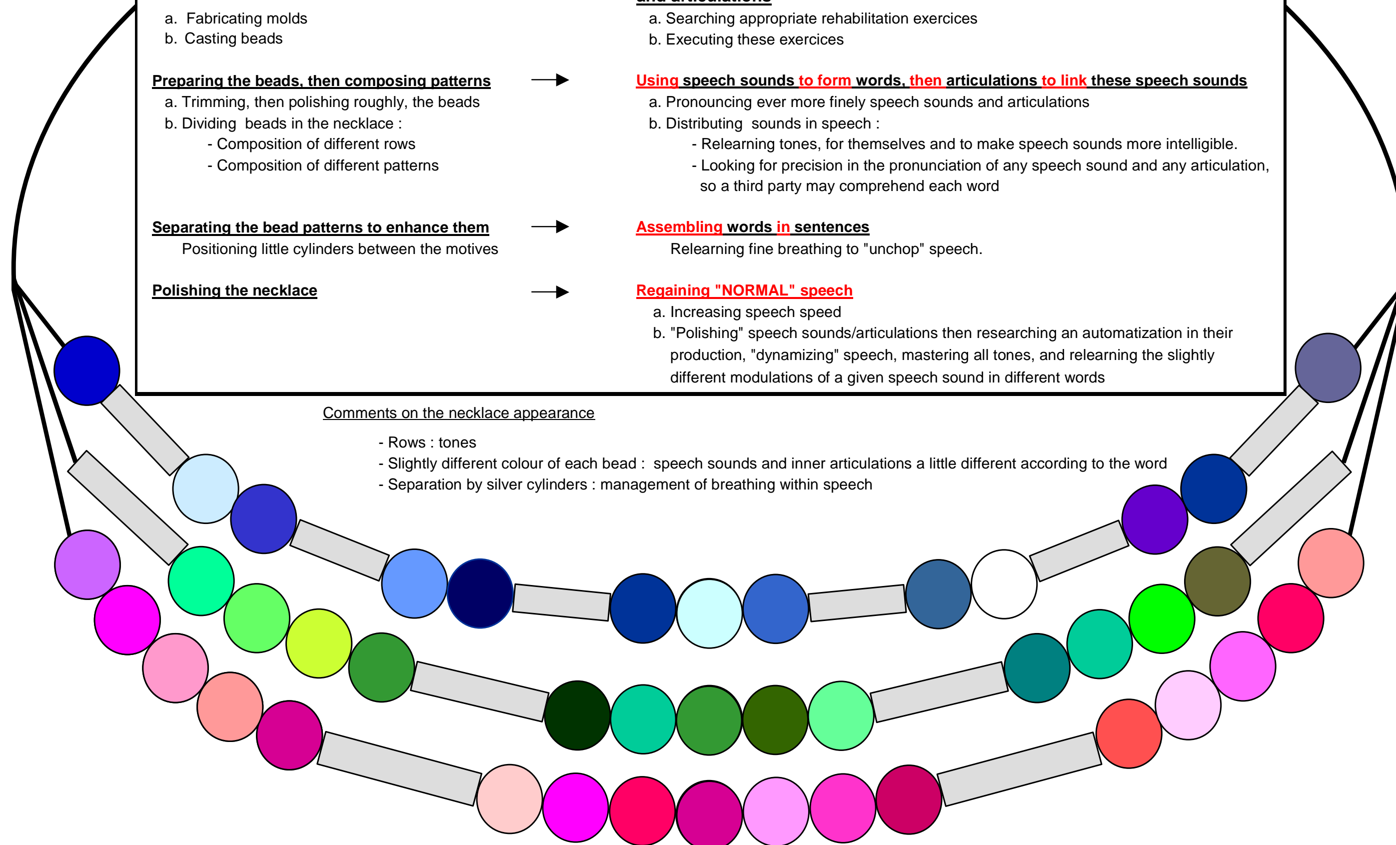
These elements subtracted, my speech rehabilitation of 54 months would have been shortened by 40 months. It would then have lasted only 1 year 2 month, or less than 2 years if I apply Emma's cautious method (50% security margin) for the computation of rehabilitation time.

Parallel between my rehabilitation from dysarthria and the creation of a necklace with several rows of multicolored glass beads forming patterns separated by small cylinders

Constant and INCREASING speech rehab improvement



Crafting the necklace	→	Rehabilitating speech
Designing the necklace a. Determining the color of each bead b. Drafting, then drawing precisely, each bead	→	**Elaborating speech sounds** a. Defining the exact auditory sensation of certain speech sounds b. Devising the pronunciation mode of the speech sounds to relearn
Creating the pearls of the necklace a. Fabricating molds b. Casting beads	→	**Determining rehabilitation means, then re-learning thanks to them speech sounds and articulations** a. Searching appropriate rehabilitation exercices b. Executing these exercices
Preparing the beads, then composing patterns a. Trimming, then polishing roughly, the beads b. Dividing beads in the necklace : - Composition of different rows - Composition of different patterns	→	**Using speech sounds to form words, then articulations to link these speech sounds** a. Pronouncing ever more finely speech sounds and articulations b. Distributing sounds in speech : - Relearning tones, for themselves and to make speech sounds more intelligible. - Looking for precision in the pronunciation of any speech sound and any articulation, so a third party may comprehend each word
Separating the bead patterns to enhance them Positioning little cylinders between the motives	→	**Assembling words in sentences** Relearning fine breathing to "unchop" speech.
Polishing the necklace	→	**Regaining "NORMAL" speech** a. Increasing speech speed b. "Polishing" speech sounds/articulations then researching an automatization in their production, "dynamizing" speech, mastering all tones, and relearning the slightly different modulations of a given speech sound in different words



Comments on the necklace appearance

- Rows : tones
- Slightly different colour of each bead : speech sounds and inner articulations a little different according to the word
- Separation by silver cylinders : management of breathing within speech

Final situation

My speech is almost good.

It does not show I rehabilitated it. It is adequate for all life situations.
However, if I "polished" the "necklace of my speech", I did not manage to make it "sparkle", so very small specificities remain.

Regarding them, Speech therapist II made a very seductive parallel between my speech rehabilitation and the driving of a car. He told me : "[I was] in the garage, and will henceforth be on the road. Therefore, [I] will speak better" thanks to my speech practice in life after rehabilitation.

3. Writing (relearning to write)

Rehabilitation thanks to therapy sessions : 15% - of which, at the center, 13% -
Personal rehabilitation : 85%

Summary

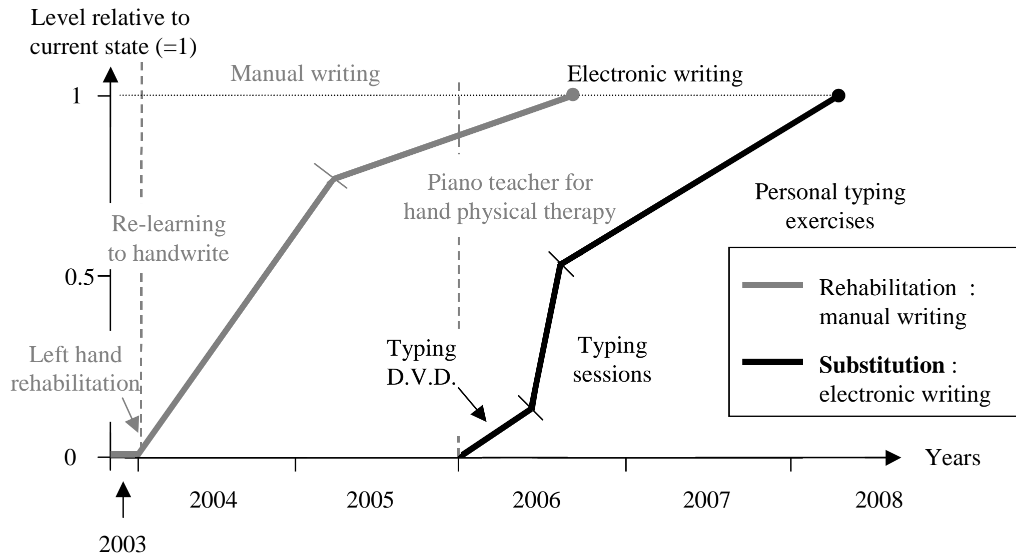
INITIAL SITUATION		**Ability to handwrite nil**
Cause		Rupture of a wrist cartilage and damaged cerebellum.
REHABILITATION MEANS	Ther. sessions 15%	Numerous handwriting exercices, practiced in occupational therapy of the rehabilitation center then in Bichat hospital.
	Personal 85%	1. Intense practice of handwriting exercises. 2. Study of a hand-rehabilitation physical therapy book. 3. Physical therapy exercices for the right hand with a piano teacher who had had specialized physical therapy for one of his hands. ***Substitution of electronic writing for handwriting*** 4. Use of keybord typing manuals. 5. Three dactylography programs in training institutes. 6. Typing of book summaries during entire afternoons for 1.5 year. 7. Typing of sequel frameworks to a book written by a friend.
Duration		4 years 3 months
FINAL SITUATION		**- Handwriting : from the left hand, acquired but not good** **- Electronic writing : good**

Initial situation

Relearning to write was essentially a post-rehabilitation task.
I began by rehabilitating my hands, to control them. However, I mention here only relearning to write because it was the purpose of hands rehabilitation.

I am a right-hander. Because of several casts to my arm, I used the left hand to relearn to write. With the left hand, problems to handwrite are solely caused by the damaged cerebellum.

Relearning curve



The summit of the curve relative to handwriting is high, because it does not correspond to the level of a very good handwriting, but to that of mine. Compared to very good handwriting, it is approximately 60%.
In consequence, I substituted electronic writing (automatic touch-typing) for handwriting.

General considerations

My need to relearn handwriting was mostly caused by my damaged cerebellum. However, it was also due to the fracture of my right hand, consisting in the severance of a cartilage between the wrist and the thumb. Three operations took place to mend it :

- Attempt to reduce the wrist fracture (failure).
- Attempt to graft the wrist with bone taken from my cranium (failure).
- Implant of a wrist prosthesis (small and flexible round carbon fiber piece fixed by screws).

Since I relearned to handwrite with the left hand, operations to the right wrist were not an obstacle to handwriting exercises.
However, my right wrist needed to regain flexibility (wrist flexibility was very useful when I substituted electronic writing for handwriting). For this, when my right arm was not in a cast I had rehabilitation sessions for the wrist in the physical therapy of the center.
In addition, to improve the flexibility of my wrist the physician in charge of me in the center had the prosthesis-maker make a brace. This brace was comprised of two thermoformed plastic pieces which went around my hand and my wrist, connected by an elastic band that raised the hand.

Paramedical rehabilitation means

- **Relearning to handwrite in occupational therapy of the rehabilitation center**

  Months 3-15. Tri-weekly session

It was very long, and began at a very low level. I wrote to begin with letters, then words, then sentences. After a year, I could write paragraphs.

- **Handwriting sessions at Bichat hospital**

  Month 28-29 - Weekly session

The very low return of these sessions led me to cease them. I put an end to my relearning of handwriting, and substituted electronic writing for it.

Personal rehabilitation means

I tried numerous things in order to improve my handwriting ability, be it through better writing ability of the left hand or through rehabilitation of the right hand.
Attempts comprised :

- Rehabilitation exercices. They were done with a piano teacher who had had very numerous sessions of specialized physical therapy for one of his hands damaged by an accident. They aimed at enabling me to write again with the right hand.
- Personal handwriting exercises. I used for them a primary school handwriting exercise book.
- Purchase, then study, of a physical therapy book specialized for the hand.
- Purchase, then use, of pen grips enabling a better "unrolling" of the hand during writing.

Each of these attempts improved very little the writing of the left hand or the writing ability of the right hand. Hands themselves are not to blame, but the damaged cerebellum, which can no longer perfectly coordinate handwriting gestures; in consequence, my handwriting was unsatisfactory and I did not see how I could improve it more than I had already done.

So, I decided to **substitute** electronic writing for handwriting.
To learn it was very long and very difficult, owing to my coordination problems. One of my typing manuals mentions 50 hours as the time length required to learn typing. I needed 1 500 hours to type correctly, and 2 500 hours to type almost well. Nowadays I type well on a keyboard.

To reach this level required :

- Purchase, then practice, of several typing software programs.
- 3 weekly typing sessions in 2 professional training institutes, one generalist and one specialized in the typing jobs assistants sometimes do.
- Use of my laptop computer to :
    - do typing exercises
    - type 5-page essay summaries
    - type sequel frameworks to a novel just written by a friend

During 1.5 year, I took the suburban train 5 days a week to go to Paris. I went there to learn typing during 4 to 6 hours.
To do this, I went to one of various libraries or in a "Starbucks" coffee shop. The shops of this chain are particularly practical to learn typing, for they almost systematically have a large table suited for laptop computers. Furthermore, I found their employees very pleasant, and their behavior was a strong incentive for me to go there, owing to the psychological pressure I lived under.

Final situation

- Handwriting : poor, sufficient for a tolerant addressee, otherwise insufficient
- Electronic writing : good (I wrote with it the guide of which this book is part)

4. Intellect

Rehabilitation thanks to therapy sessions : 8% - at the rehabilitation center, none - Personal rehabilitation : 92%

Summary

<table>
<tr><th colspan="2">INITIAL SITUATION</th><th>- Reasoning : small attention problems
- Memory : light "knowledge gaps"</th></tr>
<tr><td colspan="2">Cause</td><td>CVA and high-pressure in the cranium</td></tr>
<tr><td rowspan="2">REHABILITATION MEANS</td><td>Ther. sessions 8%</td><td>A few months of neurological rehabilitation.</td></tr>
<tr><td>Personal 92%</td><td>1. Electronic games for neurological rehabilitation, purchase then daily practice.
2. Physical tactical game, purchase then daily practice.
3. At the rehabilitation center, preparation of an international fund management professional examination, the CFA.
(origin : books brought by a close friend)
4. Chess, daily plays from 2004 to 2007.
5. When I left the rehabilitation center, intellectual rehabilitation thanks to the exercises of an international examination to conduct studies after initial studies, the GMAT.
(origin : mention by a close friend)</td></tr>
<tr><td colspan="2">Duration</td><td>4 years 5 months</td></tr>
<tr><td colspan="2">FINAL SITUATION</td><td>- Reasoning : completely recovered
- Memory : completely recovered</td></tr>
</table>

Initial situation

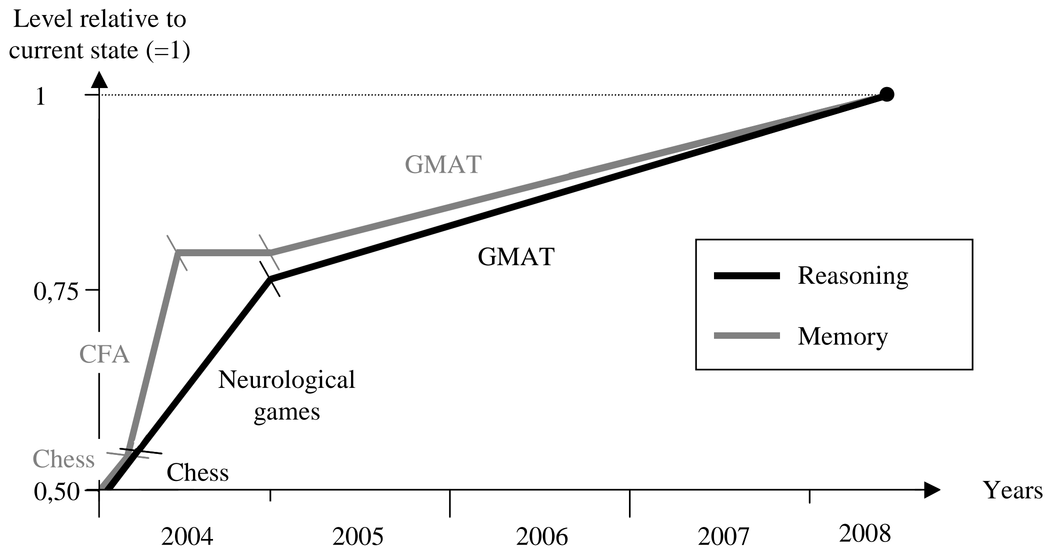
- Reasoning - a part of intelligence that is “framed”

  The neurologist of the rehabilitation center noticed small attention problems.

- Memory

  I forgot things and repeated myself sometimes.

Rehabilitation curve



The CFA had a very strong influence on memory, but a weak one on reasoning. So, it does not appear on the reasoning curve.
Neurological games had a strong influence on reasoning, but a weak one on memory. So, they do not appear on the memory curve.

General considerations

My rehabilitation of intellect comprises 2 elements :

A. Rehabilitation of reasoning
B. Rehabilitation of memory

I did not pay much attention to the medical definition of my intellectual problems, for 2 reasons :

- The definition of the domain of intellect is very awkward.
- Medical norms for patients are undemanding.

Paramedical rehabilitation means

In spring 2004, I had a trimester of neurological rehabilitation out of the rehabilitation center. This rehabilitation essentially consisted in the playing of electronic games for neurological training, and of a physical tactical game.

Personal rehabilitation means

- **Games of neurological rehabilitation** [4]

  Electronic games : months 6-12, half an hour daily

  Physical game : months 6-11, half an hour daily - months 12-23, 15 minutes daily

I enjoyed these games a lot. So, I asked my paramedical therapist for their references, bought them and practiced them daily :

  - Electronic games for neurological training

    Training in particular on that of those games which appealed to me most. At the beginning, struggle at its intermediary difficulty level, and occasional failure to finish a game in the time allocation of 3 minutes. After 7 months, play at its highest difficulty level, and use to make approximately 30 games in half an hour.

  - Physical tactical game

    Playing against my Dad for half an hour for 6 months, then for only a quarter of an hour for a year. Thereafter, occasional playing against myself but with a lower frequency and for pleasure only.

- **Chess**

  Months 5-42 - Very variable daily frequency, from 1 to 5-6 games

I played at the beginning on week-ends with an electronic game my sister had given me as present for Christmas 2003. Then, when I could walk I played chess on weekdays with my travel game in the rehabilitation center : I memorized and played openings, and played against myself. Finally, I had the luck to find another patient, Roman, with whom I played several times a week in the "club" of the hospital. I beat Roman... not a single time. I was very happy to learn to play correctly thanks to him. Since he could not move the pieces, he indicated the references of his move and I played it for him.
When I left the rehabilitation center, I continued to play but much less often, and I stopped when I moved into my student apartment in Paris.

[4] Appendix D provides the references of these games.

- **CFA examination**

  Months 7-11 - Several hours daily, on most days

The CFA is an international professional fund management examination. For my intellectual rehabilitation, in January 2004 a close friend called Tristan brought me the examination manuals at the rehabilitation center.
The memorization of the very important amount of knowledge (amount contained in 5 books) necessary for the examination allowed me to significantly rehabilitate my memory. I did not work at all in fund management before the accident, but I found the examination very interesting. So, I registered in February 2004 for a session of the examination that took place in May. I still could not independently walk when I registered, but I was well on my way to leaving the wheelchair.
At the beginning of May, I had a good score on the practice examination, and I had to take the examination 15 days later. A stag party for one of my friends took place the day before. I wanted to participate, but I wished to go to sleep just after dinner to be in fine form for the examination. However, I was "kidnapped", and kept at the party that was taking place in a moving autobus.

The persons who did this rendered me a valuable service : I was rehabilitating all the time, and I absolutely needed to relax ! I could not dance at all during the stag party, but I had a lot of fun. I went to sleep in the morning around 9 am, the hour at which the examination began. This stag party was much more lively and wild than would have been the fund management examination session, and certainly more beneficial !

- **GMAT examination**

  Months 58-59 - Exercises from month 16. Very variable daily practice, from a complete absence to several hours

At the end of December 2004, a close friend called Amir informed me he was taking the GMAT to apply to an MBA. He needed to take this examination to be, partly as a result of the rank that proceeds from it, selected by the admission committee of an MBA.
This information about GMAT had a very important effect on my intellectual rehabilitation. I bought examination preparation manuals, and I did exercises on most days for 3 years. This practice enabled me to finish to rehabilitate in terms of reasoning and memory.

In spring 2008, I decided to enlist for a session of the examination. I prepared the examination in June and July, and I took it at the very beginning of August. The failure of the person who was receiving candidates to comprehend my name caused *Pure Speech Rehabilitation II.*

Final situation

- Reasoning : I regained pre-accident level.
- Memory : I regained pre-accident level.

C. POST-EXECUTION COMMENTS

1. Negative comments

1.1. The length of my rehabilitation made me doubt about its rationality; this doubt limited my rehabilitation will

It is only in fall 2007 that I realized the logic of optimized rehabilitation chapter A of part I exposes.

That I had to rehabilitate was not my choice. However, it was indispensable, due to the physical consequences of an accident that was not my choice either.
The accident had occurred; it was part of the PAST. For my FUTURE, I had to do as well as possible with its physical consequences on my body, and I needed time to do this.

Until then, I had not rationalized my important lifetime investment (rehabilitation years invested). So, I sometimes wondered whether my rehabilitation made sense. I was very happy to be obsessed with my rehabilitation, for my temporary monomania was necessary to carry it out effectively; however, I feared this obsession was unreasonable.
My discovery of the rationality of my rehabilitation led me at last to embrace it unreservedly. The major speech improvements brought by "Pure Speech Rehabilitation" bear witness to it.

1.2. I conceptualized my speech rehabilitation much too late

I did not try to understand and formulate a well-organized idea of my speech rehabilitation until "Pure Speech Rehabilitation".
Beforehand, I used without thinking the standard speech rehabilitation techniques I had learnt from my speech therapists. They did not result in satisfactory rehabilitation results, so I carried out from December 2007 "Pure speech rehabilitation" as a last rehabilitation recourse; it was tough but worked.

Had I conceptualized from the onset my speech rehabilitation, I would have cut short by 9-15 months its time length of 4.5 years.

My negative comment of a very late reflection on speech rehabilitation can be generalized in the critique of a lack of reflection for my entire rehabilitation.
I fell back too much on paramedical professionals, so I conceptualized too lightly each specific rehabilitation.

A key element for your rehabilitation emerges from this comment :
REHABILITATION DEMANDS DOING WITHOUT THINKING, in particular without thinking further than the very near future, BUT THINKING BEFORE DOING.

2. Positive comments

2.1. I knew what I wanted : myself rehabilitated as completely as possible

Some of my friends told me : "You have rehabilitated enormously. You should look for a job". This comment left me utterly cold, for 4 reasons :

- First, none of my friends realized the extent of the specific rehabilitations I had to carry out. This is all the truer that I progressively stopped talking about them, in order to de-saturate from my rehabilitation.
- Second, I knew perfectly well that they are much more tolerant with me than the job market would be.
- Third, I refused a rehabilitation which did not allow me to completely exert my professional skills, provided I could arrive at a satisfactory rehabilitation state.
- **Last and most of all, I did not want an employer, for I had a critical prior job for myself : my rehabilitation job. I wanted to regain myself, as completely as possible, to enjoy life thereafter.**

During my rehabilitation, I lived on very small financial means. But they sufficed to enable the carrying out of my rehabilitation, which was the only thing that mattered to me.

In Book 1, My Rehabilitation, I write I refused to work for another company than myself so I could work to my rehabilitation. It was not a heart-rending choice : it obviously was what I had to do.

2.2. I refused to leave “real life”

I soon realized that people in the rehabilitation field are not at all representative of the rest of society. So, just after I had relearned to walk, I reintegrated “real life”, life outside the rehabilitation field.

Real life brought me 2 elements :

1. **Duty of rigor**

   Thanks to it, I had to be much more exacting with myself than the rehabilitation cocoon required me to be.

2. **Replenishment of psychological energy, and de-saturation from rehabilitation**

   During the first 3 years, I did not really live, for I spent almost all my time rehabilitating : I had numerous medical appointments and rehabilitation sessions, and worked alone on my body.
   During years 4 and 5, I could enjoy life a little. This enabled :

   - Replenishment of psychological energy : through the presentation of elements of pleasure that enabled to stock it up. They comprised for instance nice people whom I met, little kids, dogs, nature...
   - Desaturation : by thinking about subjects entirely exterior to rehabilitation, such as macroeconomic questions, mountain climbing and athletics, the origin of the human being...

Conclusion

I wrote the rehabilitation guide to which this book belongs in hope that it possibly be useful.
That it becomes so belongs to each of its readers.
If one of them decides to optimize her rehabilitation, I wish her success.
I **TRULY** wish her this.

GM

APPENDICES

Appendix A - Works that may enable the replenishment of your PSYCHOLOGICAL ENERGY and your de-saturation from rehabilitation

I do not translate in English the titles of the works, because :

- certain of them may be available only in French
- a work in English, especially a movie, would often be useless to a person who does not have a high enough command of this language

The name of the person who created a work, and its French title, are probably sufficient to find its version in an appropriate language.

Books

Title	Author
De l'autre côté du désespoir - Introduction à la pensée de Swami Prajnanpad	André Comte-Sponville
Le Maître et Marguerite	Michaïl Boulgakov
La petite Fadette	George Sand
Nos voisins du dessous	Bill Bryson
Montagnes d'une vie	Walter Bonatti

Graphic novels

Title	Author (s)
Les gardiens	Alan Moore / David Gibbons
L'orme du Caucase	Jiro Taniguchi / Ryuichiro Utsumi

Movies

Title	Director(s)
Rocky	John G. Avildsen
Bienvenue à Gattaca	Andrew Nichol
Voyage au bout de l'enfer	Michael Cimino
L'étoffe des héros	Philip Kaufman
Million dollar baby	Clint Eastwood
Rosetta	Luc and Jean-Pierre Dardenne
Collision	Paul Haggis
Magnolia	Paul Thomas Anderson
Barry Lindon	Stanley Kubrick
L'odyssée de l'espèce	Jacques Malaterre
Princesse Mononoke	Hayo Miyazaki
L'étrange Noël de Mr Jack	Henry Selick
Shrek	Andrew Adamson and Vicky Jenson
Monstres et compagnie	Pete Docter and David Silverman
Little Miss Sunshine	Jonathan Dayton and Valerie Farris
L'arme fatale 1,2, 3 and 4	Richard Donner
Blade Runner - the director's cut	Ridley Scott

Appendix B - Speech rehabilitation material on the OYR ! website

Speech rehabilitation material

This material is in no way adapted to all persons who have speech rehabilitation problems. It is intended for one of them who has a rehabilitation case similar to one I had, and whose speech therapist approves and specifies its use.

It comprises :

1. Part II.B.2 of this book

2. Speech rehabilitation material I used to treat my dysarthria

Internet link :

http://0fix.free.fr/3_anglais.html

Appendix C - Rehabilitation
- here, my speech rehabilitation - is a personal job

Note on appendix C

Appendix C relates to my speech rehabilitation. Aside from a few files produced at the end of the period with speechwork therapist II, I produced my rehabilitation material for *Pure Speech Rehabilitation II*. The appendix does not comprise a source file for *Pure Speech Rehabilitation I* because I mostly worked then on theatre plays (text and difficult expressions to pronounce of the text).
The "Rééducation pure parole II" (*Pure Speech Rehabilitation II*) source file comprises 3 sub-source files *:* "Première étape" (*First step*), "Orthophoniste III" (*Speech therapist III*), and "Deuxième étape" (*Second step*).
During *Pure Speech Rehabilitation II,* I produced over 110 files (often modified files, there are only approximately 30 initial files).

Translation note for appendix C

French		English
Rééducation	→	Rehabilitation
Parole	→	Speech
Orthophoniste	→	Speech therapist

1. Screen copy of my speech rehabilitation files - Speech therapist II

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↓Nom	Ext.	Taille	Date
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[Orthophoniste II]		‹RÉP›	17/06/2009 10:53
[Reeducation pure parole II]		‹RÉP›	15/08/2009 13:18

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060207 Phrases d'orhophonie	doc	30 208	06/02/2007 22:15
060307 Phrases d'orhophonie	doc	27 136	06/03/2007 22:10
060807 Phrases d'orhophonie	doc	30 720	06/08/2007 22:06
070309 Phrases d'orhophonie	doc	27 136	09/03/2007 20:42
090507 Phrases d'orhophonie	doc	26 624	09/05/2007 23:08
100707 Phrases d'orhophonie	doc	30 720	10/07/2007 09:47
120307 Phrases d'orhophonie	doc	26 112	12/03/2007 22:48
170407 Phrases d'orhophonie	doc	27 136	17/04/2007 17:38
180607 Phrases d'orhophonie	doc	27 648	18/06/2007 11:05
190807 Phrases d'orhophonie	doc	30 720	19/08/2007 13:01
200207 Phrases d'orhophonie	doc	27 648	20/02/2007 18:03
200507 Phrases d'orhophonie	doc	28 160	20/05/2007 19:12
220507 Phrases d'orhophonie	doc	29 184	22/05/2007 13:09
230107 Phrases d'orhophonie	doc	27 136	23/01/2007 17:44
230207 Phrases d'orhophonie	doc	28 160	23/02/2007 18:05
230807 phrases d'orthophonie	doc	20 992	23/08/2007 11:10
250307 Phrases d'orhophonie	doc	27 648	25/03/2007 17:03
270307 Commentaires	doc	20 480	27/03/2007 15:18
270307 Phrases d'orhophonie	doc	27 648	27/03/2007 18:57
290707 Phrases d'orhophonie	doc	32 768	29/07/2007 13:12
300107 Phrases d'orhophonie II	doc	30 720	30/01/2007 21:52
Aout phrases d'orhophonie	doc	32 256	31/07/2007 08:04
Aout phrases d'orthophonie II	doc	21 504	19/08/2007 13:05

Comment

The screen copy on the previous page shows the rehabilitation work executed from January to August 2007 with Speech therapist II.
I began only then to produce speechwork files.

2 a) Screen copy of my speech rehabilitation files - *Pure Speech Rehabilitation II*, first step

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[Reeducation pure parole II - Orthophoniste III]		<RÉP>	11/04/2009 14:01
[Reeducation pure parole II - Premiere etape]		<RÉP>	29/05/2009 20:35

f:\A. FICHIER SOURCE\Orthophonie\Reeducation pure parole II\Reeducation pure parole II - Premie

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080914 - phrases en st, ch et j et s	doc	20 480	13/10/2008 20:14
081003 Reeducation et normalisation - Document Anne	doc	25 088	13/10/2008 19:07
081022 Orthophonie pure - Document Attalli	doc	26 112	23/11/2008 21:00
081026 Orthophonie pure - Document UNIRH	doc	32 256	26/10/2008 21:53
090808 Orthophonie pure II	doc	34 304	09/08/2008 20:05
091108 La reed. ortho. pour moi	doc	29 696	11/09/2008 15:44
100808 Orthophonie pure II	doc	34 816	10/08/2008 21:39
130908 Phrases complementaires	doc	19 456	13/09/2008 13:36
140908 O.P. II - Finalite, cadre et demarche	doc	27 648	14/09/2008 21:24
140908 O.P. II Horaire type	doc	19 456	14/09/2008 22:23
150808 Orthophonie pure II	doc	32 256	15/08/2008 06:14
160808 Orthophonie pure II	doc	31 232	16/08/2008 17:25
170808 Orthophonie pure II	doc	31 232	17/08/2008 20:13
180808 Orthophonie pure II	doc	33 792	18/08/2008 20:40
210808 Orthophonie pure II	doc	35 328	21/08/2008 17:13
230808 Orthophonie pure II	doc	34 816	23/08/2008 22:45
240808 Orthophonie pure II	doc	33 280	24/08/2008 21:09
250808 Orthophonie pure II	doc	34 304	25/08/2008 22:23
250908 Ma reeducation orthophonique	doc	2 405 376	25/09/2008 22:11
280808 Orthophonie pure II	doc	35 840	28/08/2008 15:47
290908 - Phrases en st, ch et j	doc	20 480	29/09/2008 19:07
Methode complete preparation concours - 14	doc	56 832	29/12/2008 22:08
Methode orthophonie finale 4	doc	25 088	29/10/2008 14:04
Notes orthophonie pour ortho III	doc	19 456	24/09/2008 22:14
O.P. II - Expressions	doc	23 552	26/06/2008 15:05
Orthophonie pure II	doc	34 816	08/08/2008 21:00
Parole correcte - Concours	doc	19 968	25/09/2008 21:27
Poemes avec l'autobus	doc	39 936	28/12/2008 19:55
Preparation seance ortho. II	doc	20 992	28/08/2008 23:34
Retour prepa seance ortho. II	doc	28 160	29/08/2008 00:06
Calendrier et heures OP II	exe	1 305 088	06/09/2008 14:48
Exercices sons	xls	19 456	02/10/2008 20:07
OP - Jours	xls	27 648	28/12/2008 20:27
Tableau orthophonie pure	xls	16 896	28/11/2007 15:20

2 b) Screen copy of my speech rehabilitation files - *Pure Speech Rehabilitation II*, Speech therapist III

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f:\A. FICHIER SOURCE\Orthophonie\Reeducation pure parole II\Reeducation pure parole II - Orthopl

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141008 - phrases en st, ch et j	doc	20 480	14/10/2008 16:52
221008 - phrases en st, ch et j revues	doc	20 480	22/10/2008 20:47
291008 Phrases en st, ch et j et s	doc	28 160	29/10/2008 16:39
Fables La Fontaine	doc	29 696	01/12/2008 11:43
La grosse cloche sonne	doc	38 400	19/11/2008 21:27
Le loup et l'agneau et Sans dessus dessous	doc	29 184	06/12/2008 22:03
Lecture	doc	19 456	23/11/2008 19:13
Meth. compl. preparation concours	doc	64 000	31/10/2008 22:24
Methode complete preparation concours - 10	doc	67 072	09/12/2008 13:27
Methode complete preparation concours - 11	doc	64 000	14/12/2008 21:47
Methode complete preparation concours - 12	doc	58 880	24/12/2008 17:04
Methode complete preparation concours - 13	doc	57 344	24/12/2008 17:16
Methode complete preparation concours - 2	doc	65 024	09/11/2008 16:20
Methode complete preparation concours - 3	doc	71 680	13/11/2008 18:32
Methode complete preparation concours - 4	doc	68 608	13/11/2008 18:44
Methode complete preparation concours - 5	doc	75 776	18/11/2008 22:12
Methode complete preparation concours - 6	doc	93 696	23/11/2008 20:43
Methode complete preparation concours - 9	doc	63 488	07/12/2008 00:00
Methode integration Parole correcte	doc	22 528	22/10/2008 21:25
Methode orthophonie pure phase finale	doc	22 528	20/10/2008 19:46
Mots en -CH et en -J revus	doc	40 448	29/10/2008 16:28
Mots en -CH et en -J	doc	29 696	29/10/2008 15:26
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Parler lentement et sans interruption	doc	19 456	06/12/2008 19:44
Phrases difficiles	doc	124 928	03/12/2008 08:46
10022008 Exercice fricatives	ppt	44 032	02/10/2008 18:59
221008 Exercice fricatives revu	ppt	44 544	22/10/2008 20:58
PoPoPaPa exercice	ppt	31 744	02/10/2008 18:57
OP finale	xls	16 896	12/12/2008 22:18

2 c) Screen copy of my speech rehabilitation files - *Pure Speech Rehabilitation II*, second step

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Imitations	doc	222 208	17/02/2009 21:57
Je DOIS parler plus lentement pour parler mieux	doc	19 456	15/01/2009 23:41
Le loup et l'agneau, Sans dessus dessous et L'or	doc	44 544	02/01/2009 20:16
Methode complete preparation concours Parolecorrecte - 10	doc	50 688	27/01/2009 20:20
Methode complete preparation concours Parolecorrecte - 4	doc	52 224	18/01/2009 21:26
Methode complete preparation concours Parolecorrecte - 5	doc	54 784	13/01/2009 21:32
Methode complete preparation concours Parolecorrecte - 6	doc	52 736	19/01/2009 19:21
Methode complete preparation concours Parolecorrecte - 7	doc	52 736	23/01/2009 22:56
Methode complete preparation concours Parolecorrecte - 8	doc	53 760	25/01/2009 22:43
Methode complete preparation concours Parolecorrecte - 9	doc	76 800	26/01/2009 22:13
Methode complete preparation concours Parolecorrecte 11	doc	49 664	31/01/2009 19:11
Phase finale - Methode complete preparation concours Parolen..	doc	45 056	10/02/2009 17:27
Phrases difficiles selectionnees - 10	doc	32 768	27/01/2009 20:29
Phrases difficiles selectionnees - 11	doc	28 672	28/01/2009 19:09
Phrases difficiles selectionnees - 12	doc	28 160	31/01/2009 19:13
Phrases difficiles selectionnees - 13	doc	29 184	02/02/2009 18:23
Phrases difficiles selectionnees - 2	doc	37 376	12/01/2009 17:38
Phrases difficiles selectionnees - 3	doc	33 792	18/01/2009 21:37
Phrases difficiles selectionnees - 4 et 5	doc	33 792	18/01/2009 21:37
Phrases difficiles selectionnees - 6	doc	31 232	21/01/2009 18:01
Phrases difficiles selectionnees - 7	doc	33 792	23/01/2009 19:50
Phrases difficiles selectionnees - 8	doc	31 232	25/01/2009 22:25
Phrases difficiles selectionnees - 9	doc	33 280	26/01/2009 22:00
Phrases difficiles selectionnees - Phase finale	doc	19 968	10/02/2009 17:10
phrases difficiles selectionnees	doc	36 864	02/01/2009 19:45
Phrases difficiles	doc	125 440	09/02/2009 17:27
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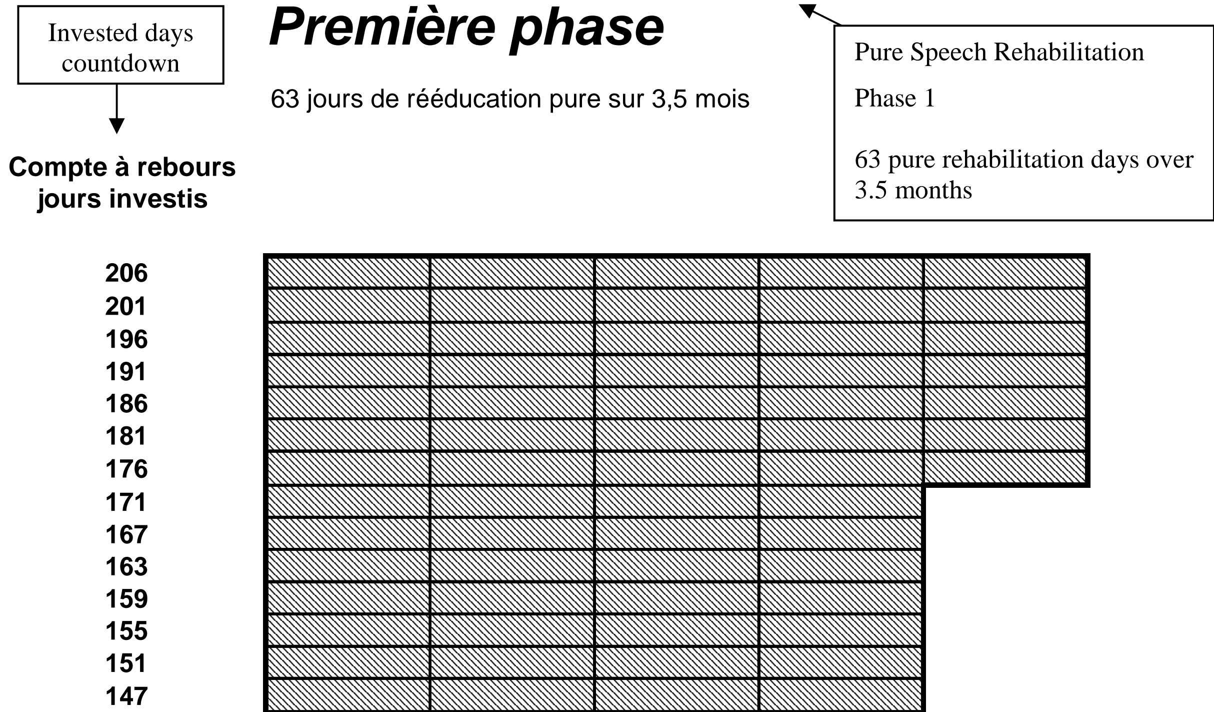
Poemes et textes - 9	doc	24 576	26/01/2009 22:04
Poemes et textes - Phase finale	doc	21 504	10/02/2009 17:14
Poemes et textes	doc	39 424	23/01/2009 21:30
Textes	doc	84 480	02/01/2009 18:54
Horaires preparation Parolenormalisee	xls	16 896	16/01/2009 21:12
OP DERNIERS JOURS	xls	16 384	13/10/2008 16:34
Preparation concours Parolecorrecte	xls	22 016	30/01/2009 21:28
Preparation concours Parolenormale	xls	19 456	08/01/2009 21:50

3 a) "Pure Speech Rehabilitation" roadmap
Pure Speech Rehabilitation I

Rééucation pure de la parole



Comments

- Investment in "Pure Speech Rehabilitation" was 206 days. I rehabilitated approximately 5 days a week.
- This page presents the 63 days of the first phase. It occurred over 99 days between December 2007 and March 2008.

Speech rehabilitation :

1. Basic rehabilitation

- ~~Phase 1 – Standard Speech Rehabilitation I~~
- ~~Phase 2 – Standard Speech Rehabilitation II~~
- ~~Phase 3 – Standard Speech Rehabilitation III~~

2. Fine rehabilitation

- **Phase 1 - Pure Speech Rehabilitation I**
- Phase 2 - Pure Speech Rehabilitation II
  - First step
  - Second step
    - First part
    - Second part

3 b) "Pure Speech Rehabilitation" roadmap
Pure Speech Rehabilitation II - First step
(08/07/2008 - 12/31/2008)

Pure Speech Rehabilitation II
- **First step**
- Second step
  - ✓ First part
  - ✓ Second part

Rééducation pure de la parole II

Première étape

Pure Speech Rehabilitation II

First step

107 pure rehabilitation days over 5 months

107 jours de rééducation pure sur 5 mois

Invested days countdown

Compte à rebours jours investis

	L	M	Me	J	V	S	D
143				07-août	08-août	09-août	10-août
139	11-août	12-août	13-août	14-août	15-août	16-août	17-août
134	18-août	19-août	20-août	21-août	22-août	23-août	24-août
129	25-août	26-août	27-août	28-août	29-août	30-août	31-août
123	01-sept	02-sept	03-sept	04-sept	05-sept	06-sept	07-sept
119	08-sept	09-sept	10-sept	11-sept	12-sept	13-sept	14-sept
114	15-sept	16-sept	17-sept	18-sept	19-sept	20-sept	21-sept
109	22-sept	23-sept	24-sept	25-sept	26-sept	27-sept	28-sept
104	29-sept	30-sept	01-oct	02-oct	03-oct	04-oct	05-oct
99	06-oct	07-oct	08-oct	09-oct	10-oct	11-oct	12-oct
94	13-oct	14-oct	15-oct	16-oct	17-oct	18-oct	19-oct
89	20-oct	21-oct	22-oct	23-oct	24-oct	25-oct	26-oct
84	27-oct	28-oct	29-oct	30-oct	31-oct	01-nov	02-nov
78	03-nov	04-nov	05-nov	06-nov	07-nov	08-nov	09-nov
73	10-nov	11-nov	12-nov	13-nov	14-nov	15-nov	16-nov
68	17-nov	18-nov	19-nov	20-nov	21-nov	22-nov	23-nov
63	24-nov	25-nov	26-nov	27-nov	28-nov	29-nov	30-nov
58	01-déc	02-déc	03-déc	04-déc	05-déc	06-déc	07-déc
53	08-déc	09-déc	10-déc	11-déc	12-déc	13-déc	14-déc
49	15-déc	16-déc	17-déc	18-déc	19-déc	20-déc	21-déc
43	22-déc	23-déc	24-déc Noel	25-déc Noel	26-déc	27-déc	28-déc
38	29-déc	30-déc	31-déc				

Comment

The roadmaps on the previous page and on the next one present respectively the days of the first and second steps of phase II of "Pure Speech Rehabilitation", *Pure Speech Rehabilitation II*. It was carried out from August,7th 2008 to February 19th 2009.

3 c) "Pure Speech Rehabilitation" roadmap
Pure Speech Rehabilitation II - Second step
(01/01/2009 - 02/19/2009)

~~Pure Speech Rehabilitation II~~

- ~~First step~~
- **Second step**
  - ✓ **First part**
  - ✓ **Second part**

Réédu cation pure de la parole II

Deuxième étape

Pure Speech Rehabilitation II

Second step

36 pure rehabilitation days over 1.5 months

36 jours de rééducation pure sur 1,5 mois

Invested days countdown

Compte à rebours jours investis

Compte à rebours jours investis	L	M	Me	J	V	S	D
36				01-janv	02-janv	03-janv	04-janv
33	05-janv	06-janv	07-janv	08-janv	09-janv	10-janv	11-janv
29	12-janv	13-janv	14-janv	15-janv	16-janv	17-janv	18-janv
24	19-janv	20-janv	21-janv	22-janv	23-janv	24-janv	25-janv
19	26-janv	27-janv	28-janv	29-janv	30-janv	31-janv	01-févr
13	02-févr	03-févr	04-févr	05-févr	06-févr	07-févr	08-févr
9	09-févr	10-févr	11-févr	12-févr	13-févr	14-févr	15-févr
4	16-févr	17-févr	18-févr	19-févr	20-févr	21-févr	22-févr

End of speech rehabilitation

END OF REHABILITATION

Appendix D - Games I used for neurological rehabilitation

Electronic games

Entraînez votre logique et votre raisonnement (*Train your logic and your reasoning*)
Happy Neuron
Emme editor

Entraînez votre mémoire (*Train your memory*)
Happy Neuron
Emme editor

Hereabove are the references of the neurological training interactive CD-ROMs for the general public I used. Although the second CD-Rom is entitled Train your memory, I primarily used it for the reasoning games it comprises.
These CD-Roms are no longer edited, but they possibly may be purchased second-hand. Anyway, their neurological training games are in new CD-Roms available on the website www.happyneuron.fr.

Their cost was between € 10 and € 30.

Although these CD-Roms are in French, I include them in this version in English of the second book of the rehabilitation guide.
I do so because they were very useful for me. They are extremely simple to install, and the neurological training games they contain require a very basic knowledge of French.

Tactical physical game

Quarto
- Blaise Muller -
Gigamic editor

Quarto is a kind of 4-dimensional tick-tack-toe on a 16-squares board played with nice wood pieces. I used it to rehabilitate the anticipation skill.
It is not a game specific to neurological rehabilitation, but a tactical game for the general public. It is very easy to learn - 20 seconds suffice to acquire its rules - but extremely difficult to master.
It received a very high number of international awards of the “Best game of the year” type.

Its cost is approximately € 30.