

Récoltes et Semailles

ALEXANDRE GROTHENDIECK

Ongoing Translation by Sayantan Roy and Amit Kuber

Contents

I	Presentation of the Themes or Prelude in Four Movements	1
1	By Way of a Foreword	2

Part I

Presentation of the Themes or Prelude in Four Movements

Chapter 1

By Way of a Foreword

January 30, 1986

Only the foreword remained to be written before entrusting *Récoltes et Semailles* to the publisher. And I swear that I was really willing to write something that serves the purpose. Something *reasonable*, this time. Three four pages, not more, but well expressed, presenting this enormous “tome” of more than thousand pages. Something which “catches the attention” of the blasé reader, which makes him glimpse that in these little reassuring “more than thousand pages”, there could be things which interest him (or even, concern him, who knows?). It is not really my style to get someone hooked, it isn’t. But here I planned to make an exception, for once! It was necessary that “the editor crazy enough to seek adventure” (of publishing this obviously unpublishable monster) recovers his expenses somehow.

And finally no, it did not happen. I have tried my best though. And not just one afternoon, as I was planning to do it, quickly. Tomorrow it will be exactly three weeks since I am on it and the sheets are piling up. The outcome, certainly, is not what might be called a decent “foreword”. It is still no good, decidedly [?]. One changes more at my age – and I am not made that way, to sell or get something sold [?]. Even when it is a question of pleasing (oneself, and friends...).

What resulted was a sort of long “promenade” with commentary, through my oeuvre as a mathematician. A promenade intended especially to the ‘layman’—to one who ‘never understood anything in maths’. And for me, too, who never had the leisure for such a walk. One thing leading to another, I see myself leading to extricate and say things that hitherto always remained unsaid. Coincidentally, these are also the ones I feel the most essential in my work and my oeuvre. These are some of the things which are not too technical. [It is] for you to see if I have succeeded in my naive enterprise ‘to get them across’—a bit foolish enterprise for sure. My satisfaction and pleasure, would be to have been able to make you feel them. Things that many of my learned colleagues no longer know how to feel. Perhaps they have become too wise and too prestigious. This makes one to lose contact, often, with the simple and essential things.

During this “promenade through an oeuvre”, I speak a bit about my life as well. And a little bit here and there, of what *Récoltes et Semailles* is about. I’ll discuss it again and in a more detailed manner, in the “Letter” (dated May last year) which follows the “Promenade”. This Letter was intended to my former students and to my “old friends” in the mathematical world. But it is not technical as well. It can be read without problem by any reader who is interested in

learning, through a “live” account, the ins and outs which eventually led me to write *Récoltes et Semailles*. Even more than the Promenade, it will also give you a foretaste of a certain ambience, in the “big world” of mathematics. And also (like the Promenade), of my style of expression, a bit special it seems. And of the spirit too, which is expressed in this style – a spirit that is not appreciated by everyone.

In the promenade and almost everywhere in *Récoltes et Semailles*, I speak about the *mathematical work*. This is the work which I know well and first hand. Most of the things that I say are true, surely, for any creative work, [and] any work of discovery. It is at least true for the so-called “intellectual” work, the one which is mostly done “by the head”, and in writing. Such a work is marked by the blooming and blossoming of a *comprehension* of the things we are probing into. But to take an example at the opposite end, the passion of love is the urge for discovery as well. It opens up the so-called “carnal” knowledge to us, which also renews, flourishes and deepens. These two impulses – the one which, in our opinion, enlivens the mathematician at work, and that in a lover – are much closer than we generally suspect, or are willing to admit to ourselves. I hope that the pages of *Récoltes et Semailles* can contribute to make you feel it, in your work and in your everyday life.

Throughout the Promenade, it will mainly be about the mathematical work itself. On the other hand, I remain virtually silent on the *context* in which this work takes place, and on the *motivations* which play a role outside the actual working hours. This risks giving myself, or to the mathematician or the “scientist” in general, a certain flattering, but distorted, image. “Great and noble passion” kind, without any sort of correction. Along the lines, in short, of the great “Myth of Science” (with a capital *S*, if you like!). The heroic, “Promethean” myth, into which writers and scholars are vying (and continue to vie) with one another to fall over and over again. It is only the historians, perhaps, who are sometimes resistant, to such seductive myth. The truth, is that in the motivations “of the scientist”, which sometimes push him to work without measure, ambition and vanity play as important and almost universal a role as in any other profession. It takes more or less coarse, more or less subtle, forms depending on the person concerned. I do not pretend to be an exception. The reading of my testimony, I hope, will leave no doubt about this.

It is also true that the most devouring ambition is helpless to discover the slightest mathematical statement, or to demonstrate it – just as it is powerless (for example) to “have a hard-on” (in the proper sense of the term). Whether a woman or a man, what “makes one hard” is by no means the ambition, the desire to shine, to exhibit a strength, in this case sexual – quite the contrary! But it is the acute perception of something strong, very real and very delicate at the same time. One may call it “beauty”, and it is one of its thousand faces. Being ambitious does not necessarily prevent you from occasionally experiencing the beauty of a being, or of a thing, I agree. But what is certain, is that it is *not* the ambition that makes us feel it. . .

The man who first discovered and mastered fire, was someone exactly like you and me. Not at all what one imagines under the name of “hero”, “demigod” and so on. Surely, like you and me, he knew the bite of anguish, and experienced vain ointment, which makes you forget the bite. But when he “knew” fire, there was no fear, no vanity. Such is the truth in the heroic myth. The myth becomes insipid, it becomes ointment, when it is used to hide *other* aspects of the things, just as real and just as essential.

My purpose in *Récoltes et Semailles* is to speak about this aspect and the other – the impulse of

knowledge, and the fear and its vanity antidotes. I believe I “understand”, or at least know the impulse and its nature. (Perhaps one day I will discover myself, amazed, to what extent I was deluding myself...) But in case of fear and vanity, and insidious blockages of creativity derived therefrom, I know I have not been to the depth of this great enigma. And I don’t know if I’ll ever see the depth of this mystery, in the years which remain for me to live...

In the course of writing of *Récoltes et Semailles* two pictures appeared, to represent both these aspects of human adventure. These are the *child* (alias the *worker*), and the *Boss*. In the promenade that we are going to take now, almost exclusively it will be about “the child”. He reappears again in the subtitle “**The Child and the Mother**”. This name is going to become clearer, I hope, in the course of the promenade.

On the contrary, in the rest of the reflection, it is mainly the Boss who takes the frontstage. He is the boss for a reason! It would be more accurate to say it’s not *one* Boss, but Bosses *of* rival enterprises. But it is also true that all the Bosses essentially resemble each other. And when you start talking about Bosses, it also means that there will be “villains”. In Part I of the reflection (“Fatuity and Renewal”, which follows this introduction, or the “Prelude in Four Movements”), mostly I am “the villain”. In the following three parts, it is mainly “the others”. Each will have their turn!

This means that there will be, in addition to deep philosophical thoughts and “confessions” (by no means contrite), some “vitriolic portraits” (to borrow the expression of one of my colleagues and friends, who found himself a bit mistreated...). Without accounting for the large-scale and extraordinary “operations”. Robert Jaulin¹(*) assured me (half jokingly) that in *Récoltes et Semailles* I am studying “the ethnology of mathematical milieu” (or perhaps sociology, I can’t say too much). One is obviously flattered, when one learns that (without even knowing it) one is doing scholarly things! It’s a fact that in the course of the ‘investigation’ part of the reflection (rather unwillingly...), I saw a good part of the mathematical establishment pass by in the pages I was writing, without counting many colleagues and friends with more modest status.

¹(*) Robert Jaulin is an old friend. I believed to comprehend that vis-à-vis the establishment of the ethnological environment, he is in a situation (of “white wolf”) a bit analogous to mine vis-à-vis the “beautiful world” of mathematics.