Récoltes et Semailles

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Part I

Presentation of the Themes or Prelude in Four Movements

Chapter 1 In Guise of a Foreword

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Only the foreword remained to be written before entrusting Récoltes et Semailles to the publisher. And I swear that I was with the best will in the world to write something that serves the purpose. Something *reasonable*, this time. Not more that three four pages, but apposite, introducing this enormous "tome" of more than thousand pages. Something which "hooks" the blasé reader, which makes him foresee that in these little reassuring "more than thousand pages", there could be things which interest him (even, concerns him, who knows?). It is not really my style, hooking, it isn't. But here I was going to make an exception, for once! It was necessary that "the editor crazy enough to run the adventure" (of publishing this monster, obviously unpublishable) recover his expenses somehow.

And finally no, it did not occur. I have tried my best though. And not just one afternoon, as I was planning to do, quickly. Tomorrow this will make exactly three weeks that I am on it and sheets are piling up. The outcome, for sure, is not what might be called a decent "foreword". It is still missing, really! On se refait plus à mon âge - et je suis pas fait pour, pour vendre ou faire vendre.. Even when it is about pleasing (oneself, and friends...).

What resulted, was a sort of long "promenade" with commentary, across my oeuvre as a mathematician. A promenade intended especially for the 'layman'— to one who 'has 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 identify and say things that hitherto always remained unsaid. Coincidentally, they are also those that I feel the most essential, in my work and in my oeuvre. These are things which are not too technical. For you to see if I have succeeded in my naive enterprise of 'delivering' them— surely a bit crazy undertaking too. My satisfaction and pleasure, however, ce serait d'avoir su te les faire sentir. 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 also is not technical. 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 taste of a certain ambiance, 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, 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, pulsion of discovery as well. It opens us up to the so-called "carnal" knowledge, which also renews, flourishes and deepens. These two pulsions – the one which animates the mathematician at work, say, and that in the 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 it felt to you, 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 act outside the proper working hours. This risks giving my person, or the mathematician or the "scientist" in general, a certain flattering, but distorted, image. Like "great and noble passion", without any kind of correction. Along the lines, in short, of the great "Myth of Science" (with a capital S please!). Dans lequel écrivains et savants sont tombés (et continuent à tomber) à qui mieux mieux. It is only the historians, perhaps, who are sometimes resistant, to such seductive myth. The truth, it is that in the motivations "of the scientist", which sometimes a role as in any other profession. It takes forms more or less gross, more or less subtle, depending on the person concerned. I do not pretend to be an exception. The reading of my testimony will, I hope, leave no doubt about this.

It is also true that the most devouring ambition is powerless to discover the slightest mathematical statement, or to demonstrate it– just as it is powerless (for example) to "faire bander" (in the proper sense of the term). Whether one is woman or man, what what "fait bander" is by no means the ambition, the desire to shine, to exhibit one's puissance, sexual in this case–quite the contrary! But it is the acute perception of something strong, very real and very delicate at the same time. One can call it "beauty", and it is one of the thousand visages of this thing. Being ambitious does not necessarily prevent you from sometimes feeling the beauty of a being, or 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 "heros", "demigod" and so on. Surely, like you and me, he knew the bite of anguish, and felt vain ointment, which makes you forget the bite. But when he "knew" fire, there was no fear, no vanity. Similar 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 has been to speak about both aspects-the pulsion of knowledge, and of the fear and of its vain antidotes. I think I "comprehend", or at least *know* the pulsion and its nature. (Perhaps one day I will discover, in wonder, how much I was deluding myself...) But when it comes to fear and vanity, and the insidious blockages of creativity that stem from it, I know very well that I have not been at the foundation of this grand enigma. And I don't know if I'll ever see the bottom of this mystery, in the years I have left to live...

In the course of writing of Récoltes et Semailles two pictures have emerged, to represent both of these two aspects of human adventure. These are the *child* (alias the *oeuvrier*), and the *Boss*. In the Promenade that we are going to do soon, it is "the child" that will almost exclusively be the issue. It is also the one which figures in the subtitle "**The Child and the Mother**". This name is going to be clear, 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 not for nothing! It would be more accurate to say that it is not *about a* Boss, but *about* Bosses of competing enterprises. But it is also true that all the Bosses are essentially similar. And when you start talking about the Bosses, it also means that there will be "villains". In Part I of the reflection ("Fatuity and Renewal", which follows the present introductory part, or the "Prelude in Four Movements"), it is mostly me, "the villain". In the following three parts, it is mainly "the others". Each in his turn!

This is to say that there will be, in addition to philosophical reflections and "confessions" (by no means contrite), about "vitriolic portraits" (to quote a colleague and friend of mine, who found himself a bit abused...). Sans compter des "opérations" de grande envergure et pas piquées de vers. Robert Jaulin¹(*) assured me (half jokingly) that in Récoltes et Semailles what I am doing is a study of "the ethnology of mathematical milieu" (or perhaps sociology, je ne saurais plus trop dire). One is flattered of course, when one learns that (without even knowing it) one is doing scholarly things! It is a fact that during the "investigation" part of the reflection (and against my will...), I have seen, in the pages that I was in the process of writing, a good part of the mathematical establishment, not to mention many among colleagues and friends of more modest status. And in recent months, since I have sent the provisional print runs of Récoltes et Semailles last October, it has "remis ça" again. Definitely, my testimony came as a paving stone in the pond. There have been un peu sur tous les tons vraiment (except that of boredom...). Almost every time, it was not at all what I would have expected. And there also have been a lot of silence, which speaks volumes. Obviously, I had (and still have) to learn more, and of all colors, on what is going on in the noggins of one another, among my ex-students and other more or less or less well-placed colleagues-sorry, I mean on the "sociology of the mathematical milieu". To all those who have already come to make their contribution to the great sociological work of my old age, I would like to express my gratitude here.

Of course, I was particularly sensitive to the echoes in the warm tones. There were also some rare colleagues who have shared an emotion to me, or a feeling (remaining unexpressed until then) of crisis, or of degradation to the interior of the mathematical milieu of which they feel to be a part.

Outside this milieu, among the first to give a warm, even emotional, welcome to my testimony I would like to name Sylvie and Catherine Chevalley²(*), Robert Jaulin, Stéphane Deligeorge,

^{1(*)} Robert Jaulin is an old friend. I believed to comprehend that vis-á-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.

 $^{^{2}(^{*})}$ Sylvie and Catherine Chevalley are the widow and the daughter of Claude Chevalley, colleague and friend to whom the central part of Récoltes et Semailles (ReS III, "The Key to the Yin and Yang") is dedicated. In

Christian Bourgois here. If Récoltes et Semailles is going to be known more widely than that of the initial provisional print runs (intended for a very small circle), it is mainly because of them. Thanks, above all, to their communicative conviction: that what I struggled to grasp and say had to be said. And that this could be heard in a larger circle than that of my colleagues (often sullen, even surly, and by no means willing to question themselves...). Thus, Christian Bourgois did not hesitate to take the risk of publishing the unpublishable, and Stéphane Deligeorge, honoured me by welcoming my indigestible testimony in the "Epistémé" collection, alongside (for the moment) Newton, Cuvier and Arago. (I could not dream of a better company!) To each and everyone, for their repeated remarks of sympathy and confidence, occurring at a particularly 'sensitive' moment, I am happy to express my acknowledgement here.

And here we are at the start of a Promenade through an oeuvre, as an introduction for a voyage through a life. A long voyage, yes, of a thousand or more pages, et bien tassée chacune. J'ai mis une vie à le faire, this voyage, without having exhausted it, and more than a year to rediscover it, page after page. Words have sometimes been hesitant to come, to express all the juice of an experience still eluding a hesitant comprehension—comme du raisin mûr et dru entassé dans le pressoir semble, par moments, vouloir se dérober à la force qui l'étreint. But even at the instants when words seem to jostle and flow freely, it is however not haphazardly that they jostle each other and flow. Each one was weighed at the time of passage, or if not, afterwards, adjusted carefully if it was found too light or too heavy. This reflexion-testimony-voyage is not meant to be read quickly as well, in a day or in a month, by a reader who would have hastened to come to the final word. There is no "final word", no "conclusions" in Récoltes et Semailles, not more than there is in my life, or in yours. There is a wine, aged for a lifetime in the barrels of my being. The last glass that you'll drink will be no better than the first or the hundredth. They are all "the same", and they are all different. And if the first glass is spoiled, the whole barrel is; then it's probably best drink some good water (if it is found), rather than the bad wine.

But a good wine is not drunk in a hurry, nor au pied levé.

several places of the reflection, I speak of him, and of the role he played in my itinerary.