

## 11. The solitary adventure

### Contents

11.1. (46) The defended forbidden. . . . .	219
11.2. (47) The solitary adventure. . . . .	221
11.3. (48) Donet reception. . . . .	223
11.4. (49) Report of a division. . . . .	224
11.5. (50) The weight of a past. . . . .	225

#### 11.1. (46) The forbidden fruit

I had to interrupt for two days in the notes. After careful reading, it seems to me that the scenario The foregoing is, in a nutshell, a description of reality, a description that should now be a bit more. I would need to focus more closely on the respective merits of the two "horses" meditation and mathematical ; and also try to understand what events or circumstances eventually triggered the "tipping" in the patron@bet, against the forces of inertia that would rather push him to keep indefinitely an even losing bet.

Perhaps one should also probe the preferences of the kid. It@a thing now heard, he wants to change game from time to time, and the boss apparently has a minimum of flexibility to not force him whatever the cost, always playing this and never at that. In recent years he has learned to take into account the to cope with him, without waiting for pots to explode. It@not complete harmony, but it is no longer war, a sort of cordial agreement rather, that occasional tensions would tend to soften, not harden.

When it is not countered too hard, the child is quite flexible in his preferences. (It is not like the boss, who ended up learning a minimum of flexibility to his only defending body and on his old days. . . . But the fact that the child is flexible does not mean that he, too, has be attracted more strongly by one thing than by another.

It is not at all obvious often to see clearly, to distinguish between

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desires and preferences of the same p. 122

boss, or even what the boss decided once and for all. When I said to myself:

meditation is better, more important, more serious and everything and everything that mathematics, for such and such reasons (the most relevant, we suspect), it was the boss who gave himself good reasons after the fact to convince himself that the bet he was making was indeed "the good". The kid he does not say that such thing is "better", "more important" than any other. It is not focused on the speech. When he wants to do something goes there if nobody prevents it, without asking any question if this thing is "important" or "best". His desires are more or less strong from one thing to another and from one moment to another. To find preferences, there is no point in listening to the explanatory speeches of the boss, when he claims to speak on behalf of the even when he can speak only of himself. It is only by observing the child in his games that

219

## 11. The solitary adventure

may perhaps detect his predilections. And even then it@not so obvious: when he plays this with enthusiasm, it does not always mean that he would not play anything else with delight, if the boss did not put his shot of thumb to him.

Obviously that before anything else draws is **the unknown** - is continuing in the nebulous folds of the night and bring to light, what is unknown and of him, and of all. And I feel that when I added "and of all", this is the desire of the child, not a vanity of the boss, who wants impress the gallery and himself. It@a thing heard as well as what the kid brings back to each shot of the half-dark granaries and inexhaustible cellars are "obvious", childish things. More they appear obvious, more even he is happy. If they are not, it@because he did not do his job until the end, he stopped midway between darkness and day.

In math, things "obvious" that also are those on which sooner or later someone **must** fall. This is not are not "inventions" that can be done or not done. These are things that have always been there forever, that everyone rubs shoulders without paying attention, even make a great detour around, or to go over stumbling every time. After a year or a thousand, infallibly, someone ends up paying attention to the thing, to dig around, to dig it up, to look at it from all sides, to clean it, and finally

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give him a name. This

p. 123

kind of work, my favorite job, another each time could do it, and what@more, another **could not fail to do it** one day or another one (44).

It is not at all the same for the discovery of me, in the game by no means collective "meditation". What

I discover, no other person in the world, today or at any other time, can discover it at my square. This is mine alone that discover it, that is to say **also: assume**. This stranger is not I do not promise to be known, almost by force of circumstance, whether or not I take the trouble to interest myself in it. If he waits in silence for the moment when he will be known, and if sometimes, when the time is ripe, I hear him who call, there is only me, the child in me, who is called to know him. He is not a stranger in suspension. Of course, I am free to follow his call, or to shirk it, to say "tomorrow" or "someday". But it@mine and to no other than the call, and none but me can hear, no one else can follow him. Every time I followed this call, **something changed in the "business"**, more or less. The effect was immediate, and felt on the spot as a blessing - sometimes, as a sudden release, a immense relief, a weight that I carried without even realizing it often, and whose reality is manifested by this relief, by this liberation. On a smaller scale, such experiences None of these are common in any discovery work, and I have had the opportunity to talk about it. The thing though who distinguishes the work of self-discovery (whether it is open or underground) from any other work of discovery, it is precisely that it really changes something in "the company" itself. he This is not a quantitative change, an increase in yield, or a difference in size or even in the quality of the products coming out of the workshop. This is a change in the **relationship between the boss and the worker-child**. Maybe there is even a change in the boss himself, if it can to have a meaning other than for his relation to the worker, the child. For example he may look less at the production - but it is also an aspect of his relationship with the worker, by the appearance of a concern or a respect perhaps who previously were strangers to him. In all cases where I meditated, the change was in the 0 sense of a **clarification** and an **easing** in relations between boss and worker. Except in some cases p. 124 where the meditation remained superficial, meditations "of circumstance" under the only pressure of a need immediate and limited, the clarification has lasted until today, and appeasement too. 1 It goes without saying that I do here aside from the assumption, not improbable to say the least, the sudden irruption of a atomic war or another kind of rejoicing, of a nature to end suddenly and once and for all collective called "Mathematics", and much more with. . . 220

### 11.2. (47) The solitary adventure

This gives the self-discovery work a **meaning** different from any other work of discovery, then that many essential aspects are common. There is a dimension in self-knowledge, and in the work of self-discovery, which distinguishes them from all other knowledge and work. Can-be is this the "**forbidden fruit**" from the Tree of Knowledge. Perhaps the fascination exerted on me meditation, or rather that of the mysteries of which it has revealed to me the existence, is it the fascination of the fruit defended. I crossed a threshold, where fear has disappeared. The only obstacle to knowledge is inertia, inertia sometimes considerable, but finite, by no means insurmountable. This inertia, I felt it almost at every not, insidious, omnipresent. She exasperated me sometimes, but never discouraged. (No more than in the work where it is also the main obstacle, but of incomparably less weight.)

This inertia becomes one of the essential ingredients of the game; one of the protagonists to say better, in this game delicate and in no way symmetrical which has two - or three to say better: on one side the child who rushes, and the boss (inertia) who brakes everything he can (while claiming not to be there), and on the other the interviewing form of the beautiful unknown, rich in mystery, both near and far, who at one and the same time and call. . .

### 11.2. (47) The solitary adventure

This fascination with me about "meditation" was of considerable power - as powerful as it was the attraction of "the woman", which she seems to have taken the place. If I just wrote "was", that does not mean not that this fascination is extinguished today. Since a year that I invest in mathematics, she only passed in the background. Experience tells me that this situation can be reversed from day to day. next day, just as this situation itself is the effect of a completely unforeseen reversal. In fact, during each of the four long periods of meditation I spent (one of which was extended for almost a year and a half), it was something that for me was self-evident that I would continue on my launched up to my 0

last breath to probe as far as I can go the mysteries of life and those p. 125 of human existence. When the notes have accumulated in impressive stacks to the point of threatening to overwhelm my work room, I even ended up making a piece of furniture tailored to fit, in predicting wide (by a quick calculation of arithmetic progression) to also include those that would soon not to add to it over the years; I had planned a margin of fifteen years if I remember well (which was already starting to do!). There the boss had done things well, for stewardship it was the beautiful stewardship! That, and a large-scale storage of all personal papers closely related or

far from the work of meditation, was besides his last task undertaken and led (almost) to good end, just before the switchover preference and bets. It is to wonder if he had any ulterior motive head, and if he did not already see volumes of "Mathematical Reflections" fill the so-called empty rays for future "Notes".

Certainly, the passion of meditation, the discovery of me is vast enough to fill my life until the end of my days. It is also true that the mathematical passion is not consumed, but perhaps this hunger will she end up satiating in the coming years? Something in me wants it, and feels the mathematical as a hindrance to follow a solitary adventure that I alone can pursue. And I think that "something" in me is **not** the boss, nor the whims of the boss (which, by nature, is divided). It seems to me that the mathematical passion still bears the mark of the boss, and in any case. that following it moves my life in a closed circle; in the circle of a **facility**, and in a movement which is that of **inertia**, surely not renewed.

221

## 11. The solitary adventure

I wondered about the meaning of this persistent persistence of mathematical passion in my life.

When I follow her, she does not really fill my life. It gives joys, and it gives satisfaction, but it is not of a nature in itself to give real fulfillment, a fullness. As any purely intellectual activity, the intense and long-term mathematical activity has an effect rather **stultifying**. I see it in others, and especially in my own home every time I do it again.

This activity is so fragmentary, it only implements a tiny part of our faculties of intuition, sensibility, that these are dulled to

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force not to serve. For a long time I did not go

p. 126

account, and obviously most of my colleagues do not realize it more than me in time.

It©since I©e been meditating only, it seems to me, that I©e become attentive to this thing. For little one pays attention, it blindingly obvious - **math with large doses thickens**. Even after meditation two and a half years ago, where mathematical passion was recognized as a passion indeed, as an important thing in my life - when now I give myself to this passion, it remains a reserve, a reluctance, it©not a total gift. I know that a so-called "total donation" would actually be a kind of abdication, this would follow an inertia, it would be a leak, not a gift.

There is no such reserve in me for meditation. When I give myself, I give myself totally, he there is no trace of division in this gift. I know that by giving myself, I am in complete agreement with myself and with the world - I am true to my nature, "I am the Tao". This gift is beneficent to me and to everyone. he open to myself as to others, resolving with love what in me remains tied.

The meditation opens me to others, it has the power to untie my relationship to him, even though the other one remains-would be tied. But it is very rare that there is an opportunity to communicate with others so little about the work of meditation, of this or that thing that this work made me know. This is not because he would be things "too personal". To take an imperfect picture, I can not communicate on maths that interest me at a given moment, that with a mathematician who has the necessary baggage, and who at the same time is willing to be interested in it too. It happens that for years I am fascinated ciné by such mathematical things, without meeting (nor even trying to meet) other mathematician with whom to communicate about them. But I know that if I looked for it, I would find it, and even if I could not find any, it would be simple question of chance or conjuncture; that things that interest me can not fail to interest someone and even some, whether in ten years or in a hundred years no matter basically. This is what gives meaning to my work, even if it is done in solitude. if there were no other mathematicians in the world and there should not be any, I do not think that maths would keep meaning to me

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- and I suspect that this is not the case for any other mathematician,

p. 127

or any other "seeker" in any way. This ties in with the observation made earlier that for me "the mathematical unknown" is what nobody else knows - it©something that does not depend on my only person, but of a collective reality. **Mathematics is a collective adventure**, continuing for millennia.

In the case of meditation, to communicate about it, the question of "baggage" does not arise; not at the point where I am at least, and I doubt it will ever arise. The only question is that of a interest in others, which responds to the interest that is in me. It is therefore a curiosity with regard to what really passes in oneself and in others, beyond the facades of rigor, which do not hide much as long as we are really interested in seeing what they cover. But I learned that the moments when in a person such an interest appears, the "moments of truth" are rare and fleeting. It is not uncommon, well

### 11.3. (48) Donation and welcome

luggage that they carry with them, more or less heavy or light, what is called a "culture". He belongs of the image that they have of themselves, and reinforces this image, that they never examine, exactly like another who is interested in maths, flying saucers or angling. This is not that kind of "baggage", or that kind of "interest," that I wanted to talk about earlier - while the same words here designate things of a different nature.

In other words: **meditation is a solitary adventure**. His nature is to be lonely. Not only ment the **work** of meditation is a lonely job - I think this is true of any work of discovery, even when it fits into a collective work. But **knowledge** born of meditation work is knowledge "lonely", knowledge that can be **shared** and even less "communicated"; or if it can be shared, it is only in rare moments. It's a job, an acquaintance that goes against the current of the most inveterate consensus, they worry everyone. This knowledge certainly expresses simply, with simple and clear words. When I express myself, I learn by expressing it, because the expression

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is part of a job, driven by intense interest. But these simple words p. 128

limpid people are powerless to communicate meaning to others when they come up against the closed doors of indifference or fear. Even the dream language, of a totally different strength and infinite resources, renewed constantly by an indefatigable and benevolent dreamer, can not cross these gates. . .

There is no meditation that is solitary. If there is the shadow of a concern for approval by anyone, of a confirmation, of an encouragement, there is work of meditation nor discovery of oneself. The same thing is true, one will say, of any real work of discovery, at the very moment of the work. Certainly. But outside of the work itself, approval by others, be it a relative, or a colleague, or a whole milieu of which one is a part, this approbation is important for the meaning of this work in the life of the man who gives himself to it. This approval, this encouragement are among the most powerful incentives, which make the "boss" (for take this picture) gives the green light unreservedly so that the kid gives himself to heart joy. They are the ones especially that determine the investment of the boss. It was not different in my own investment in mathematics, encouraged by the kindness, warmth and confidence of people like Cartan, Schwartz, Dieudonne, Godement, and others after them. For the work of meditation on the other hand, there is no one such incentive. It's a passion of kid-workers that the boss is nice background tolerate more or less as it **not "reports" nothing**. It is fruitful, certainly, but it is not those that a boss aspires. When he does not borrow himself about it, it is clear that it is not in meditation that he will invest, the boss is gregarious!

Only the child by nature is solitary.

### 11.3. (48) Donation and welcome

Speaking yesterday of the solitary essence of meditation, I was touched by the thought that the notes I write for almost six weeks, which ended up becoming a kind of meditation, are nevertheless intended for the publication. This has, of course, influenced the form of meditation in many ways, including by the desire for a conciseness, and also that of a discretion. One of the essential aspects of meditation, namely constant attention to what is happening to me at the very moment of my work, only occasionally, and superficially. Surely all this had to

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creep on during labor and its p. 129

quality. I feel, however, that he has meditation quality, above all by the nature of his fruits, by the appearance a knowledge of myself (in this case, that of a certain **past** mostly) I had to pre-  
feel evaded. Another aspect is spontaneity, which has meant that for any of the soon fifty "sections" or  
223

## 11. The solitary adventure

"paragraphs" in which spontaneously reflection has grouped, I could not have said by starting it in it would be the substance; each time it revealed itself on the way only, and each time the work brought new facts to light, or shed new light on previously neglected facts.

The most immediate meaning of this work was that of a dialogue with myself, of a meditation, therefore. Yet the fact that this meditation is destined to be published, and moreover, to serve as an "opening" the "Mathematical Reflections" which must follow, is by no means an accessory circumstance, which would have been dead letter during work. It makes for me an essential part of the meaning of this work. If I suggested

yesterday that the boss surely finds his account (he who is master to "find his account" in all, or almost!), this does not mean that its meaning is reduced to that - to a "return" late, posthumous almost, the famous three-legged horse! More than once I have felt that the deep meaning of an act exceeds sometimes the motivations (apparent or hidden) that inspire him. And in this "return to mathematics" I guess yet another meaning than to be the result-sum of certain psychic forces that have found themselves in presence in my person at that time and for such reasons.

This "meditation" that I am pursuing to offer to those whom I have known and loved in the mathematical world - if I feel that it is an important part of this glimpsed meaning, it is not in the gift will be accepted. Whether he is welcomed or not does not depend on me, but on whom only he is speaking to. That he is welcomed is not indifferent to me, certainly. But that is not my responsibility. My only responsibility is to be true in the gift I make, that is to say, to be myself.

What makes me aware of meditation are humble and obvious things, things that do not pay off mine. These are also the ones that I will not find in any book or treat, so scholarly, deep, awesome as it is - those that no other can find for me. I questioned a "fog", I

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bothered to listen to it, I learned

p. 130

a humble truth about a "sports attitude" and its obvious meaning, in my relation to mathematics as in my relationship to others. I would have read "in the text" the Holy Scriptures, the Qur'an, the Upanishads, and again Plato, Nietzsche, Freud and Jung over the market, I would be a prodigy of vast and profound learning - that this would have made that **move away** from that truth, childlike truth evident. And I would have repeated a hundred Christ-words "happy are those who are like little children, for the Kingdom of Heaven belongs ", and will have commented on them finely, that it would have only served to keep me away from the child in me, and humble truths that bother me and that the child alone sees. It is **these things**, the best that I have to offer.

And I know that when such things are said and offered, in simple and clear words, they do not are not welcome so far. To welcome is not simply to receive information, with embarrassment or even with interest: "So, who would have doubted ...", or: "It is not so surprising after all ...".

To welcome, often, is to recognize oneself in the one who offers. It is getting to know oneself through the person of others.

#### 11.4. (49) Statement of a division

This short reflection on the meaning of this work, and on the gift and the welcome, comes as a digression in the thread of reflection; or as an illustration rather of some aspects that distinguish "meditation" any other work of discovery, including mathematical work. I realized yesterday that these aspects have a dual purpose, namely two **opposite effects**: a unique fascination for "the same" and a total lack of interest for the "boss". It seems that this double effect is in the nature of things, that it does not can not be mitigated by any compromise or arrangement. Whatever we do, when the kid

224

#### 11.5. (50) The weight of a past

follows his true predilection, the boss does not find his account, but not at all!

There is no doubt that this is the meaning of the change that has taken place, which could well make a clean sweep of meditation

in my life in the coming years (with the exception of "circumstantial meditations", as there are three month). I do not think that these must be years completely sterile for that, nor the year past has been sterile. But it is also true that

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what I learned (outside math) is minimal, if I p. 131

compare to what I learned in any of the previous four years. The strange thing is that each of the four long periods of meditation that I lived were times of great fullness, without anything to suggest that something in me was frustrated. Yet, if cooking pots have exploded is that somewhere there was pressure, and this pressure was not to be the same day; she has had to be there, somewhere out of sight, for weeks or months, while I was intensely and totally absorbed in meditation.

But here I am carried away by the impetus of the pen (or rather, the typewriter). The reality is that (except in the last meditation period, which was cut off in full swing by an event competition and circumstances), the intensity of the meditation decreased gradually from a moment, as a wave just to be followed by another preparing to take his place ... The feeling of fullness, to tell the truth, followed the same movement, with the difference that it was only present waves-meditation, and not waves- "mathematical".

The situation I am trying to identify is no longer, it seems to me, a situation of conflict, but it becomes apparent that it still contains the germ, the potentiality of the conflict. She is now for me the sign perhaps the

more visible through its influence on the course of my life, **division** in me. This division is none other than boss-child division.

I can not stop it. All that I can do, now that it is well detected, in this manifestation- there, it is to be attentive, to continue the signs and the evolution during the months and years which are in front of me. Maybe this passion for maths, a bit unfortunate it must be said, will it be consumed by force to burn (as has already been consumed another passion in me ...), to give place to the only passion of the discovery of me and my destiny.

This passion is vast enough, I said, to fill my life - and surely my entire life will not be enough to exhausting.

### 11.5. (50) The weight of a past

It has been a few days since I finished putting the finishing touches to "Harvests and Seeds" - after having believed, for over a month, that I was

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about to finish in the next few days. Even this time- p. 132

here, having put "the last hand", I was not entirely sure yet if I had indeed finished - there remained a question indeed that I had left in suspense. It was to "understand what events or conjunctures ended up triggering the "swing" in the setting "of the boss" ", in favor of mathematics instead of meditation, against considerable forces of inertia. Without deliberate purpose my thoughts came back with some insistence to this question, in these last days where yet I had already begun to encroach on others of any other order, including mathematical questions (from conformal geometry). Much to enjoy again this "end of launch" meditating, to dig a little bit and leave room clean.

Several associations appear, when I try to answer "the pif" why "I go back to maths"

(in the sense of a significant investment and planned to be long-term, of the order at least of

225

### 11. The solitary adventure

a few years). Perhaps the strongest of all is the feeling of chronic frustration that I have ended up feeling in my teaching activity for six or seven years. There is this feeling stronger and stronger to be "**under-employed**" and even, in many cases, to get involved and give the best of myself for morose students who have nothing to do with what I have to give.

I see everywhere beautiful things to do and just waiting to be done. Often, just one derisory baggage to address them, it is these things themselves that blow us what language to develop to identify them, and what tools to acquire to dig them. I can not help but see them, just because of regular contact with maths (at a very modest level) from a teaching activity, even in the periods of my life when my interest in math is very marginal. Behind every thing interview, so little that one searches, other beautiful things still, which cover and reveal others in their turn. . . that whether in maths or elsewhere, wherever you look with real interest, you will see a wealth, to open a depth that one guesses inexhaustible. The frustration I am talking about is not to happen so little that it is to communicate to my students this feeling of richness - of depth - would be only a Spark of desire to go around at least what is right at their fingertips, to give it to their heart content during the few months or years they are in any case decided to invest in an activity called "for the purpose of

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prepare a particular diploma. Except for two or three of the students I had since

p. 133

ten years, it seems that the idea to "give their heart" frightens them, they prefer for months and years stay arm dangling to trample, or difficulty do work taupe which they know the ins nor outs, as long there after graduation. There would be much to say about this sort of paralysis of creativity, that has nothing to do with the existence or non-existence of "gifts" or "Faculties" - and it joins the very beginning of my thinking, where I flicked through the root cause of such blockages. But it is not my purpose here, which is rather to note the chronic state of frustration these situations, constantly repeated throughout the last seven years of teaching activity, have ended up creating in me.

The obvious way to "solve" such frustration, at least insofar as this is the "mathematical ticien "in me and not that of the teacher is to make myself at least some of these things

I was desperate to see the end to grab purposes by any of my students. This is what

I have done so little here and there, whether by occasional reflection of a few hours or even few days on the sidelines and on the occasion of my teaching activity, or during periods of heavy frin-mathematical mange (which sometimes occurred as real explosions...), which may last for weeks or months. Such casual and jerkily could lead more often than a brand

first rough of a question, and a vision of more fragmentary - it was more a vision more

clear the work ahead, while the work itself is still to do and to be better seen, only seems hotter. I gave it two months ago an overall sketch of the main themes I started so slightly to take the measurement. This is the "Outline of a Program", which I have already had occasion to allude, and which will eventually be attached to this reflection, to build together Volume 1 of "Reflections Mathematics".

It's pretty clear that this alone prospecting work ("private" so to speak) was not enough to solve my frustration. This feeling of "underemployed" surely reflected the **desire** (of ego origin, I believe, that is to say desire "the boss") **to perform an action**. This is less than the action on others (my students say them

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moving them "to communicate something," or help them to have such a degree that

p. 134

could allow them to apply for such positions, etc ...) that the action "mathematician": contributing to the discovery of such unexpected events, the outbreak of such a theory, etc. . . This joins the immediately

226

#### 11.5. (50) The weight of a past

observation made above, from the fact that mathematics is a "collective adventure". If I am interrogated on my arrangements when I did the math over the last ten years, a period in my life when the idea would not come to me that I could get back one day to publish, and when it was more or less equally clear that none of my present or future students would have no use of my work prospecting - it seems to me as soon as they were not yet of someone's provisions

do something for his own personal pleasure or pushed by an inner need which concerns only itself, without relation to others. When I do math, I think somewhere inside me there is of course these maths are made to be shared with others, for being part of a larger thing I

competition, something which is not of an individual nature. This "thing", I could call "the mathematician" or better "our knowledge of mathematics things. "The term" we "here refers doubtless

first, concretely, the group mostly mathematicians I know and with whom I have common interests; but there is no doubt also that exceeds this select group as much as it exceeds

my person. This "us" refers to **our species**, as this, by some of its members through ages, became interested and is interested in the realities of the world of mathematical objects. I have never before

Right now as I write these lines, thought of the existence of this "thing" in my life, let alone wonder about its nature and its role in my life as a mathematician and teacher.

The desire to perform an action to which I have referred, seems to me at home in my life mathematician, follows: out of the shadows to which is **unknown to all**, not only to me (as

I saw above), and this, again, for being put **at the disposal of all**, so to enrich a "patrimoine" common. In other words, the desire to contribute to the expansion, enrichment

this "thing" or "heritage" that goes beyond my person.

In this desire, of course, the desire to extend myself through my work is not absent. For this aspect, I find the munchies "growth"

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expansion, which is a characteristic of the self, the "boss"; p. 135

this is its intrusive appearance and, ultimately, destructive (see note 44 § 13.1.1 p. 260). Yet I go also has the desire to increase the number of things that (for a short or long time) will more

or less my name is far from exhausting, to cover this desire or this larger force, which makes me want help enlarge a common heritage. It seems to me that such a desire may find satisfaction (if not

"In my business", where the boss is still quite pervasive, at least among mathematicians for more maturity) while the role of himself remain anonymous. It might be a form

"Sublimated" the trend towards larger ego by identifying with something beyond it. AT

Unless this kind of force is no ego by nature itself, but more sensitive and

deeper, it expresses a deep need, independent of any packaging, certifying link

deep between the life of a person and that of the entire species, a link that is part of the meaning of our existence individual. I do know, and that is not my intention here to probe such questions, of vast scope.

My purpose is rather to examine (in a smaller optical) a concrete situation regarding my

person: a situation of frustration, then, with a partial and temporary outlet by a mathematical activity sporadic tick. The logic of the situation, therefore, was to get me sooner or later to **communicate** what I

found. Because until last year I was not prepared to consent to my mathematical passion

the large investment and long-term that would have been required to "use" for purposes

publication by a "work room" circumstantial, mines that I put in day, I had the alternative to communicate to some mathematicians enough friends "in the know" things at least to me

held most dear.

I think if I had found over the past ten years a mathematician friend who plays vis-à-vis

## 11. The solitary adventure

me a role **of contact** and source of information (as was the case in Serre very large extent for years in the 50 and 60), in conjunction with **Relay** for transmit "information" that I could send it (role Serre had not had to play once, because I me was loading myself!), my desire "to exert math in action" would have found sufficient satisfaction to solve my frustration while contenting myself with an in

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vestment and episodic moderate energy

p. 136

in mathematics, leaving the largest part of my new passion. The first time I addressed a mathematician friend with such expectation (at least implicit in me) was in 1975, and last time in 1982, there is a year and a half. Funny coincidence, both times it was trying to "place" (For it is passed and, who knows, developed at the end of ends!) The same "program" algebra homologic and homotopical, the first germs back to the fifties, and was perfectly "Mature" (according to the firm conviction that I had) before the end of the sixties; a program that Preliminary development and broadly is precisely this theme Continued Champs I@ supposed to now write the Introduction! Still, for reasons probably pretty different from one case to another, my attempts to find a "point of contact" as there had been (before 1970) with Greenhouse, and then with Deligne, petered out. A common circumstance Yet is the relatively limited availability that I was willing to grant the math. This surely contributed on both occasions I spoke (in 1975 and 1982), making the lame communication. In fact, I was looking especially to "put" something without too much worry about making the necessary effort "(Re) aware" to be on my side a satisfactory contact for my correspondent, many more "in the know" than me (to say the least!) for common in homotopy techniques.

I might consider the "Letter to ..." which serves as the first chapter Continued Fields (letter February last year, there is little more than a year) as my last attempt to find an echo with one of my old friends, some of my ideas and concerns now. Continuation started thinking (or rather, resume) in this letter would become (but I doubt even for me weeks) the first mathematical text since 1970 promised a publication. It is almost a year only later I received an indirect response to this substantial letter (compare Note 2 (38)). That- This was more eloquent than any other letter received to date a mathematician colleague to make me feel some vis-a-vis my modest person provisions become common among my mathematician friends since I left the middle which I belonged with them. There is in this letter from someone which I addressed as a friend, in warm sympathy arrangements, a deliberate of

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derision, which reminded me of a particularly violent way thing I finally realize

p. 137

increasingly clear in recent years. Previously, I had the opportunity especially note taking a distance with regard to my person himself, in the "big world" mathematical, and before all others, including those who were my friends more or less close (45). Here it is not over focusing distances at the people, but rather a consensus in nature and as a fashion she posing as matter of course, between people "in the know" so little: the kind of math by bundles of a thousand pages, and concepts with which I turned down people@ears for a decade or two (46,47), are not very serious on the whole good; that there is not much to bombinate much worthwhile, and that apart from toast to "general non-sense" around the notion of schema and

2 These notes were in fact a continuation of the long letter. . . , Who became the first chapter. They were typed in machine to be legible for that friend of old, and two or three others (especially Ronnie Brown) that I thought might be interested. This letter also never received a response, and it has not been read by the recipient, who almost a year after (my question if he had received good) showed genuinely surprised that I could even think of a time he could read, seen the kind of mathematics that we should expect from me. . .

228

## 11.5. (50) The weight of a past

étale (who agreed their utility sometimes, alas, we want to be acknowledged), it is more charitable forget at least the rest; that those who would nevertheless mine still sing that kind of trumpet grothendieckienne, despite the obvious good taste and guns seriously, are put in the same bag their Master, admitted or not, and they have only to blame themselves if they are treated as they deserve. . .



Surely, the many echoes in this sense (I have just transcribed "in the clear") that reached me since 1976 (50), and especially the last two or three years, eventually awaken in me a fiber combativity was somewhat dormant over the past decade. They have raised, as a reflex, the urge to me throw into the fray, to close the spout these greenhorns who did not understand anything - a reflex completely silly in short, the bull who just show a piece of red cloth and shake in front of his nose, for that as soon as he starts fresh and in motion, forgetting the way that he was to keep quiet and that was his! I still think it is quite epidermal reflex, and he would not have been enough to him only make me shake me. Moreover, and fortunately, do math is much more charm than zeroing in on a piece of cloth by being larder all sides. But do math, and continuing to against all working style approach} things that are mine, it also a little "jump into melee ", is to affirm my face for signs of contempt, rejection - that come in no doubt, in response to the disdain that my old friends felt or grew feel me, if not for them, at least respect of a

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environment they continue to identify wholeheartedly. So too, so slightly, keep p. 138  
After red fabric, instead of following **my** path.

That idea was presented to me several times in recent weeks, and that perhaps to be an examination of this aspect especially if is routed reflection today. Along the way, a Another aspect appeared, which forces me surely have a large part also, but which is not connected not a simple combative reflex. Rather, a desire that is in me, and that right now I can discern yet clearly the nature, make sense of the mathematical work that I did in the last ten or twelve years, or to see him take all meaning; which direction (I am convinced) can not be reduced that of a private pleasure or personal adventure. But even if the nature of this desire is not understood, while I have not taken the time to examine it more closely, this reflection is enough to show me that it is there, in that desire, that really is the strength that weighs on me and my hand strength, so say, for a mathematical investment - the power of "tipping". It would be just as much. fabric red or not. If it is a sign of attachment to the past is the past of the past decade, the past "Post-1970" therefore, not the past already written things in black and white, things done, those before 1970.

Basically, there is no me worry about these things, about the fate the future, "posterity" reserve them (while it is doubtful that there is even a posterity...). What interests me in this past, this is not what I have done (and fortune has or will own), but rather what did not was made in the comprehensive program that I then before the eyes, which only a small part found himself carried by my efforts and those of friends and students who sometimes were willing to join me. Without having planned or sought, the program itself is renewed, along with my vision and mathematical approach things. Over the years, the focus has shifted to both themes, as About my same: instead whether accomplishing major **tasks** of meticulous foundation, my first about now is to probe the **mysteries** that have fascinated me the most, such as that of "patterns" or the description "geometry" of the Galois group of  $Q$  over  $Q$ . Along the way, certainly,

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I can p. 139  
at least help to sketch the foundations here and there, as I started to do (among others)  
229

### 11. The solitary adventure

in "The Long March through Galois theory", or as I am trying to do in Pursuit the fields. The purpose yet changed, and style that expresses it.

In other words: I glimpsed in the last decade mysterious things and great beauty in the world of mathematics things. These things are not personal to me, they are made to be communicated - the same sense of having interviews and I feel it is to communicate, to be included, understood, assimilated. . . But communicate, if only to himself, but also the deepen, develop so slightly - it a **job** . I know, of course, it is not question

I live after this work, even if he still had a hundred years to spare. But this was not to be my concern Today, how many years or months I will devote to this work then the time I have left to live and discover the world, so that **other** work waiting for me that only I can do. It is not in my power, and it not my role, to settle my life seasons.

230

### 12. NOTES for the first part of "CROP AND SEMAILLES"

**Contents**

**12.1.0** ..... 233  
Note 1 ..... 233  
**12.2.0** ..... 234  
Note 2 ..... 234  
**12.3.0** ..... 234  
Note 3 ..... 234  
**12.4.0** ..... 234  
Note 4 ..... 234  
**12.5.0** ..... 235  
Note 5 ..... 235  
**12.6. My friends Surviving and Living.** ..... 235  
Note 6 ..... 235  
**12.7.0** ..... 236  
Note 7 ..... 236  
**12.8.0** ..... 236  
Note 8 ..... 236  
**12.9.0** ..... 236  
Note 9 ..... 236  
**12.10. 0** ..... 236  
Note 10 ..... 236  
**12.11. Aldo Andreotti, Ionel Bucur.** ..... 237  
Note 11 ..... 237  
**12.12. 0** ..... 237  
Note 12 ..... 237  
**12.13. 0** ..... 238  
Note 13 ..... 238  
**12.14. 0** ..... 238  
Note 14 ..... 238  
**12.15. 0** ..... 238  
Note 15 ..... 238  
**12.16. 0** ..... 239  
Note 16 ..... 239  
231

12. NOTES for the first part of "CROP AND SEMAILLES"  
**12.17. 0** ..... 239  
Note 17 ..... 239  
**12.18. 0** ..... 239  
Note 18 ..... 239  
**12.19. Jesus and the twelve apostles.** ..... 239  
Note 19 ..... 239  
**12.20. 0** ..... 241  
Note 20 ..... 241  
**12.21. 0** ..... 241  
Note 21 ..... 241  
**12.22. 0** ..... 241  
Note 22 ..... 241  
**12.23. 0** ..... 242  
Note 22  
..... 242  
**12.24. The Child and the Master.** ..... 242  
Note 23 ..... 242  
**12.25. 0** ..... 242  
Note 23 ..... 242  
**12.26. Lapeurdeplay.** ..... 243  
Note 23 "  
..... 243  
**12.27. The two brothers** ..... 244  
Note 23 "  
..... 244  
**12.28. Failed unenseignement (1).** ..... 245

Note 23iv. ....	245
<b>12.29. 0</b> .....	<b>245</b>
Note 23v. ....	246
<b>12.30. 0</b> .....	<b>246</b>
Note 24. ....	246
<b>12.31. Ethical consensus - and control of information.</b> .....	<b>246</b>
Note 25. ....	246
<b>12.32. 0</b> .....	<b>247</b>
Note 26. ....	247
<b>12.33. The "youth snobbery", or defenders of purity.</b> .....	<b>247</b>
Note 27. ....	247
<b>12.34. 0</b> .....	<b>248</b>
Note 28. ....	248
<b>12.35. 0</b> .....	<b>248</b>
Note 29. ....	248
<b>12.36. 0</b> .....	<b>248</b>
Note 30. ....	248
<b>12.37. 0</b> .....	<b>248</b>
Note 31. ....	248
232	

12.1. Ø	
<b>12.38. Centfersdanslefeu or: riennesertdesécher!</b> .....	<b>249</b>
Note 32. ....	249
<b>12.39. 0</b> .....	<b>249</b>
Note 33. ....	249
<b>12.40. The impotent hug.</b> .....	<b>249</b>
Note 34. ....	249
<b>12.41. 0</b> .....	<b>250</b>
Note 35. ....	250
<b>12.42. 0</b> .....	<b>250</b>
Note 36. ....	250
<b>12.43. 0</b> .....	<b>251</b>
Note 37. ....	251
<b>12.44. 0</b> .....	<b>251</b>
Note 38. ....	251
<b>12.45. 0</b> .....	<b>251</b>
Note 39. ....	251
<b>12.46. Visit</b> .....	<b>251</b>
Note 40. ....	251
<b>12.47. Krishnamurti, or release become hindrance.</b> .....	<b>252</b>
Note 41. ....	252
<b>12.48. The salutary wrenching.</b> .....	<b>253</b>
Note 42. ....	253
<b>12.49. 0</b> .....	<b>254</b>
Note 43. ....	254
<b>12.50. 0</b> .....	<b>254</b>
Note 44. ....	254

**12.1. 0**

**Note 1**

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(Added March 1984) There is no doubt unfair to say that my "style" and my "method" of work p. 141 have not changed, while my mathematical style of expression has changed profoundly. Most Much of the time spent for a year in "The Pursuit of Fields" was run on my machine write to type reflections that are to be published almost as is (in addition near relatively short notes added later for ease of reading with references, corrections errors, etc ...). No scissors or glue to painstakingly prepare a manuscript "definitive" (which especially should not let show through the process that led there) - it©the same when changes of "style" and "method"! Unless separate mathematical actual work of writing work, presentation of results, which is artificial because it does not match the reality of things, work mathematical being inextricably linked to writing.

## 12. NOTES for the first part of "CROP AND SEMAILLES"

## 12.2. 0

**Note 2**

(Added March 1984) On reading the last two paragraphs, I had a sense of discomfort due to the fact that writing them, I involve others and not myself. Obviously the thought that my own person might be concerned not touched by writing me. I certainly did not learn anything when I thus merely put black on white (probably with some satisfaction) things since the years I have seen in others, and views will confirm in many ways. In the following reflection I am led to remember that attitudes vis-à-vis others contempt have not failed in my life. It would be strange that the link I grasped between contempt for others and self-contempt is absent in the case of my person; sound reason (and also the experience of similar situations of blindness to my own respect, which I ended my reporting) tell me it must surely not be so! This is just yet, for now, a simple deduction, the only possible use would be to make me see for myself what is happening and see and consider (if does exist, or existed) contempt of myself still hypothetical, so deeply he completely buried so far escaped my eyes. It is true that things do not look to missed!

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It suddenly strikes me as one of the most crucial, precisely because it is so much

p. 142

hidden. . . 1 .

## 12.3. 0

**Note 3** I refer particularly to conjectures feues Mordell, Tate, of Shafarevich, who found all three demonstrated last year in a forty-page manuscript Faltings at a time where consensus established people "in the know" ruled that these conjectures were "out of range"! he is that "the" fundamental conjecture that serves as a cornerstone program of "algebraic geometry anabelian" which is dear to me, is just near the Mordell conjecture. (It would even seem that it is a consequence of this, which showed that the program was not a story for people serious. . . )

## 12.4. 0

**Note 4** Even today besides, we meet "demonstrations" of uncertain status. It was so for years the demonstration by Grauert the finiteness theorem that bears his name, that person (And goodwill have not failed!) Do manage to read. This confusion has been resolved by other demonstration transparent tions, some of which went further, who took over from the demonstration initial. A similar situation, more extreme is the "solution" of the problem called "four-color" which, the computational part was settled with blows of computer (and a few million dollars). It therefore is an "Demonstration" which is no longer based in the firm conviction from understanding a mathematical situation, but in the fact that credit to a machine devoid of the ability to understand and whose mathematician User ignore the structure and operation. Even if the calculation is confirmed by other computers, according to other computer programs, I do not consider so far as the problem of the four colors is closed. He will have only changed its face in the sense that it is more not to seek against-example, but only a demonstration (read it of course!).

1 (August 1984) See, however, about the reflection of the last two paragraphs of the note "massacre", n ° 87.

234

## 12.5. Ø

## 12.5. 0

**Note 5** This fact is even more remarkable that until about 1957, I was regarded with some reserve by more than one member of the group Bourbaki, who eventually co-opt me, I think, with a certain reluctance. A good-natured joke tidying myself among the "dangerous specialists" (Analysis Func

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tional). I sometimes felt Cartan unexpressed reserve more serious - for a few years, p. 143 I had to give the impression of someone ported to Free and superficial generalization. I saw it surprised to find in the first (and only) writing a little longer than I did for Bourbaki (on the differential formalism on varieties) thinking so little substantial - it was not good hot when I proposed to handle it. (This thought I was useful again years later, developing the formalism of residues from the viewpoint of coherent duality.) I was also the most often dropped during the Bourbaki Congress, especially during public readings of essays, being although unable to follow lectures and discussions at the rate they were continuing. It is possible that I

Ⓒ not really for collective work. Still, this difficulty I had to put myself in the joint work or the reservations that I could create for others reasons for Cartan and others not I have at no time brought sarcasm or rebuke, or only a shadow of condescension aside all at most once or twice at Weil (really a special case!). At no time does Cartan divested with equal kindness toward me, cordiality footprint and also this touch of humor all his own that for me is inseparable from his person.

### 12.6. My friends Surviving and Living

**Note 6** Of these friends, I should probably count as Pierre Samuel, whom I had known previously especially in Bourbaki, as Chevalley, and who (like him) played an important role within the group Surviving and Living. It does not seem to me that Samuel had been so focused on this illusion of superiority scientist. He especially contributed much, I feel, common sense and good humor he put smiling in the common work, discussions, relations with others, and also to carry through with the role of "Reformist awful" in a group brought to the analysis and radical options. He remained in Survive and live some time after I removed myself, acting director of the Bulletin of the same name, and he left with good grace (to join the Friends of the Earth) when he felt that his presence in this group had ceased to be useful.

Samuel was in the same environment that restricts me, which did not prevent it belongs to friends these bubbling years I think I learned something (anything bad student that I was...). These manners

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being, like those of Chevalley while they resemble little, was a better antidote p. 144 for my "meritocratic" inclinations, that the most striking analysis!

It now appears to me that for all the friends of this period I have learned anything, it is more by their ways of being and different sensitivity of the mine, and which "something" ended up communicate, by explanations, discussions, etc ... I remember above all about this, and more Chevalley and Samuel, Denis Guedj (who had a great influence on Surviving and Living Group) Daniel Sibony (which is kept away from the group, while continuing its evolution from a corner half disdainful eye, half-mocking) Gordon Edwards (who was co-actor of the birth of the "movement" in in June 1970 in Montreal, and who for years has made energy wonders for maintaining "edition American "newsletter Surviving and Living in the English language), Jean Delord (a physicist about my 235

### 12. NOTES for the first part of "CROP AND SEMAILLES"

age, man fine and warm, who had taken me affection and the survivrien microcosm), Fred Snell (At another physicist based in the United States, Buffalo, which I hosted in his country house for spending several months in 1972).

Among these friends, five are mathematicians, physicists are two, and all are scientists - which suggests that the closest midst of me in those years remained a scientific environment, and especially mathematicians.

### 12.7. 0

#### Rating 7

The preceding paragraph is the first in the introduction that is heavily crossed out on my manuscript initial and provided many overloads. The description of the incident, the choice of words came first against the grain, against the tide - a force apparently pushing to pass on the quick incident, as a matter of conscience, to "get serious". These are the familiar signs of

**resistance** here against the elucidation of this episode, and its scope as revealing an inner attitude.

The situation is quite similar to that described at the beginning of this introduction (para. 2), the time of "crucial" the discovery of a contradiction and its meaning in a mathematical work: that is when **the inertia** of the es-took his reluctance to part with incorrect or insufficient vision (but where our person is not engaged), which acts as

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resistance". It is active in nature, inventive necessary to achieve

p. 145

walnut same fish without water, while the inertia I mentioned is just a passive force. In the case, much more than in the case of a mathematical work, the discovery that just appeared in all its simplicity, in all its evidence, is followed in time by a sense of relief

a weight, a sense of **liberation** . This is not just a feeling - it is rather a perception

Acute and appreciative of what just happened, which **is** a liberation.

### 12.8. 0

**Note 8** As will become clear in the following, this ambiguity did not "cleared the aftermath awakening 1970 ". There is a typical strategic retreat of the " me ", who leaves the profit and loss period "before awakening", which immediately becomes the dividing line for "after"

perfect!

12.9. 0

**Note 9** This is not entirely accurate, there is at least one exception among my closest colleagues, as will appear later. There was then a "lazy" typical of memory, which often tends to "Move to as" the facts that "stick" not with a vision of things familiar and ingrained long.

12.10. 0

**Note 10**

For example, I can not count the number of letters on matters both mathematics as practical or personal, sent to colleagues or former students whom I considered friends, and who have never received a response. It does not seem that it is only special treatment reserved

236

12.11. Aldo Andreotti, Ionel Bucur

my person, but a sign of a change of manners, from echoes in the same direction. (These concern, indeed, cases where one who sent a letter mathematics was not known to the recipient, mathematician in sight. . . )

**12.11. Aldo Andreotti, Ionel Bucur**

**Note 11**

Of course. it is not impossible that there is oversight on my part - besides my arrangements particularly "polar" in those days were not much encouraged to talk with me about this stuff, nor bring me remember a conversation in this direction that might have occurred. What is certain, is that it should be very exceptional to say the least that the issue of fear is addressed (without call it by that name. . . ), And it should be just as today, especially in the "beautiful people".

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Among my many friends in this world, except Chevalley, who had become aware of this am- p. 146  
biance fear, at least in the sixties, the only other of which it seems he has caused me  
the levy is clearly Aldo Andreotti. I had met him, and that of his wife Barbara  
and their twin children (still small), in 1955 (at a party at Weil in Chicago, I think). We  
stayed very connected until the "turning point" of 1970, when I left the middle that was  
ours and have a little lost touch. Aldo had a very keen sensibility, which had not blunted  
by trade with mathematics and with "thrillers" like me. There was in him a sympathy gift  
Spontaneous those he approached. This set him apart from all the other friends I have known the  
mathematical community, or even outside. At his friendship always took precedence over the interests mathe-  
Common matic (not missing), and that one of the few mathematicians who I have so little  
about my life, and he hers. His father, like mine, was Jewish, and he had to suffer in Italy  
Mussolini, like me in Hitlerite Germany. I saw him always available to encourage and  
support young researchers, in a climate where it was difficult to be accepted by the establishment.  
His spontaneous interest was always the first to the person, not to a "potential" or mathematical  
to a reputation. It was one of the most engaging people I had the chance to meet.  
This evocation of Aldo brings out the memory of Ionel Bucur, also won unexpectedly and before  
age, and as Aldo, even late (I grow) as the friend we love to find that as  
partner mathematical discussions. One felt in him a kindness, next to an unusual modesty,  
a propensity to constantly disappear. It is a mystery how a man as little inclined to take  
for important or to impress anyone, has eventually found Dean of the Faculty of Sciences in  
Bucharest; probably because the idea never occurred to him to challenge the charges he was far from coveting,  
but his colleagues and political authority rested on his shoulders, tough it must be said. He was son of  
farmers (something that had to play in a country where the "class test" is important), and had the good sense and  
simplicity. Surely he must be aware of the fear surrounding the notoriety of man, but surely  
as the thing must have seemed to him for granted as the natural attribute of a position of power. I  
But do not think that he himself

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ever inspired fear in anyone, or certainly his wife Florica or p. 147  
their daughter Alexandra, nor his colleagues or students - and the echoes that I could have go far in this  
meaning.

12.12. 0

**Note 12** The word "day" is here to be taken literally, not as a metaphor.

237

12. NOTES for the first part of "CROP AND SEMAILLES"

12.13. 0

### Note 13

It is clear that the above description has no other claim than to try to restore both Somehow, through concrete words that betrays me this "fog" of memory, which is condensed in no case so little accurate, I could here give a description so little "realistic" or "objective". It would distort my argument that to say to this passage that colleagues who are reluctant to sit in the front rows, or who have not star status or eminence, are necessarily tied anxiety by talking to one of these. This was obviously **not** the case for most of the friends I known in this environment, even among those who happened to haunt symposia and seminars. What is true without reservation is that the status of "eminence" creates a barrier vis-à-vis ditch those without similar status, and it is rare that the gap vanishes, were that the space for discussion. I added that the subjective distinction (which seems to me quite real) between "front row" and "swamp" can not not be reduced to sociological criteria (social position, positions, titles, etc...) or even "status" renowned, but it also reflects the psychic peculiarities of temperament or more provisions difficult to define. When I arrived in Paris at the age of twenty, I knew I was a mathematician, I had **done** the math, and despite the scenery which I had the opportunity to speak, I felt the bottom "One of them", while only one to know, and not even be sure first that I would continue to make mathematics. Today I am inclined to sit in the last row (on the rare occasions when the question arises).

### 12.14. 0

**Note 14** One might think that this contradicts the assertion of lack of leadership, then it is not. For former Bourbaki, it seems to me Weil was seen as the soul of the group, but never as a chef". When he was there and when he pleased, he became "playmaker" as I said, but

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it was

p. 148

not the law. When he was cranky it could block the discussion of such a subject he disliked, even to resume quiet about another conference when Weil was not there, or even the next day when he was no longer obstructed. Decisions were taken unanimously by the members present recital that it was not excluded (or even rare) that a person is in the real against the unanimity of all others. This principle may seem absurd to group work. The extraordinary thing is that it walking yet!

### 12.15. 0

**Note 15** I have not felt this "allergy" style Bourbaki has given rise to difficulties communication between mathematicians and I or other members or supporters of Bourbaki as it would have been the case if the spirit of the group had been parochialism, elite among the elite. Beyond styles and fashions, there were in all members of the group a keen sense for mathematical substance, where whether it comes. It was during the sixties I remember only some of my friends, calling of "troublemakers" as mathematicians whose work did not interest him. As for things I did: knew practically nothing otherwise I tend to take for granted such assessments, impressed by so many casual insurance - until I discovered that this "troublemaker" was a original and profound spirit, which had not had the good fortune to please my brilliant friend. It seems to me that in some

238

### 12.16. 0

Bourbaki members, an attitude of modesty (or at least reserve) to the work of others, when we ignore this work or imperfectly understands, has eroded first, while still remained this "instinct mathematical "who felt rich substance or solid work, without having to refer to a reputation or a reputation. By the echoes that come to me here and there, it seems to me that one as the other, modesty as instinct, have now become rare things in what was my mathematical environment.

### 12.16. 0

**Note 16** In fact, several of Bourbaki members had surely their own microcosm "to them" more or less extended, besides or beyond the bourbakien microcosm. But it is perhaps no coincidence that in my own case, such a microcosm not occurred around me after I stopped doing Part of Bourbaki, and all my energy was invested in tasks that were personal to me.

### 12.17. 0

**Note 17**

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This is especially outside the scientific community that I met warm echoes action p. 149 in which I committed, and a driving aid. Besides the friendly support of Alain and Roger Lascoux Godement, I must also be noted here especially that of Jean Dieudonné, who moved to Montpellier the Correctional hearing, to add a warm testimonial to other testimonies in favor a lost cause.

## 12.18. 0

### Note 18

I think this lack of discernment was not from negligence on my part in these twice, but rather a lack of maturity, of ignorance. It is only ten years Later I started to pay attention to locking mechanisms, both in my own person in my family or among students, and to measure the enormous role they play in the lives of everyone, not just at school or university. Of course, I regret not having had both occasions the discernment of a more mature, but not to have clearly expressed my impressions based or not. When I noted in this case a job done without serious, the naming of these things for what they are seems a necessary and beneficial thing. If in another case also, the conclusion that I was shooting was hasty and unfounded, I was not the only one yet whose responsibility was engaged. The student and shaken again had the choice either to take a leaf (maybe that what happened first time) or be discouraged, and perhaps then to change jobs (which is not necessarily a bad thing either!).

### 12.19. Jesus and the twelve apostles

Note 19 Since 1970 until today still a student, Yves Ladegaillerie, prepared and passed a thesis with me. Students in the first period are P. Berthelot, M. Demazure, J. Giraud. Mrs. M. Hakim, Ms. Hoang Xuan Sinh. Illusie L., P. Jouanolou. M. Raynaud, M. Raynaud, N. Saavedra, JL Verdier. (Six of them have also completed their thesis work after 1970, thus at a time when my availability

239

## 12. NOTES for the first part of "CROP AND SEMAILLES"

mathematics was more limited.) Among these students, Michel Raynaud takes a special place, having found by itself the key issues and concepts that are the subject of his thesis, he more developed entirely independently; my role of "supervisor" itself has thus merely read the thesis completed to constitute the jury and take part.

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When it was me who was proposing a subject, I took care to limit myself to those I had a

p. 150

relationship strong enough to feel able, if necessary, to support the work of the student. A notable exception was the work of Ms. Michèle Raynaud theorems of local and global Lefschetz for the fundamental group, expressed in terms of 1-fields on suitable slack sites. That question seemed (and has indeed proved) difficult, and I had no idea for demonstration conjectures tures that I proposed (which could also little doubt). This work continued to early 70s, and Ms. Raynaud (as was previously the case for her husband) developed a delicate and original method without any assistance from me or from elsewhere. This excellent work opens Besides the question of an extension of Ms. Raynaud results to the case of n-field, which seems duty to represent the natural outcome in the context diagrams, theorems like "theorem Lefschetz weak. "The wording of the relevant conjecture here (which can little doubt either) However uses in an essential way the notion of n-field, whose prosecution is supposed to be the main object this volume 2 , as the name "In the Fields of Pursuit" suggests. We definitely in its place,

Another case is quite apart from Ms. Sinh, whom I had first met in Hanoi in December 1967 on the occasion of a seminar-month course that I gave at the University of Hanoi evacuated. I offered the following year his thesis. She worked in the strenuous conditions of the times war, his contact with me merely episodic correspondence. She was able to come to France 1974/75 (on the occasion of the International Congress of Mathematicians in Vancouver), and then pass his thesis Paris (before a jury chaired by Cartan and comprising Schwartz, Deny, Zisman and me). Finally, we must mention me even Pierre Deligne and Carlos Contou-Carrère, who both have a little figure rises, the first to the 1965-1968 years, the second to the 1974-1976 years. One and the other obviously had (and still have) unusual ways, they used very differently and with very different fortunes too. Before coming to Bures, Deligne was a little student Tits (in Belgium) - I doubt he was student of someone in mathematics aware sense. Contou-Carrère was student Santalo (in Argentina), and for a while Thom! little

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or less). Mon

p. 151

and the other had the stature of a mathematician when the contact is established, except that Contou-Carrere lacked method and craft.

My role with mathematical Deligne has simply let him know, by the week, the little that I knew in algebraic geometry he learned as one listens to a tale - as if he had always known; and making way too, to raise questions that most often it was response on the field or



in the following days. These are the early work of Deligne I have known. Those after 1970 (for him as also for my "official students") are known to me only by very scattered and distant echoes 3 . My role with Contou-Carrère, following what he says to himself early in his thesis, was limited to introduce the language patterns. I have followed that by far in any case the work he has prepared as State doctoral thesis in recent years on a topic of the current that escapes my ability.

2 This is in fact the volume of 3 Reflections Mathematics, not of this volume 1 Crops and Seeds - see Introduction, p. (v).

3 I have had occasion to browse a few reprints of Berthelot and Deligne, they were kind of send me.

240

12.20. Ø

It was after a few mishaps in the vast world that Contou-Carrère has been ultimately leads recently, in extremis and (to me it seems now) unwillingly, to call on my services for act as supervisor and form a jury. (This exposed him to the risk of figure student Grothendieck "after 1970" in a Guess where this can present serious drawbacks. . . ). I have accomplished this task as best I could, and it is likely that this is the last time I will exercised this function (at a state doctorate). I am particularly happy in this rather special circumstances, the friendly competition of Jean Giraud, who also took his time on one month or two to make a careful reading of the voluminous manuscript, which he has made a full report and warm.

12.20. 0

Note 20

This makes me think about Monique had taken Hakim, who was not more engaging to true say, I wonder how she did it to keep the morale! If she has struggled at times, it was not in Anyway the point to make sad or gloomy, and work us has been in a cordial atmosphere and relaxed.

12.21. 0

Note 21

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It might be more accurate to say that for the temperament of mine, is the **maturity** p. 152 necessary that failed me yet to fully assume a teaching role. My temperament acquired has long been marked by excessive predominance of "male" traits (or "yang"), and one of the aspects maturity is precisely balance "yin-yang" dominant "female" (or "yin").

(Added later.) Even more than a mature, I see that it is a certain **generosity** me lacking in my life as a teacher until today - a generosity that is expressed more delicately by availability of time and energy, and that is essential. This lack has not expressed visible (by an accumulation of situations of failure say) in my first teaching period, probably mainly because it was offset by a strong motivation in the students who chose to come work with me. In the second period against from 1970 to today, it seems that this lack is at least one reason, and that in any case that involves me most directly to the overall failure I see in my teaching at research (from the level of an AED so). See to it subject "Outline Program" para.8 and para 9 "Review of teaching activity", where the feeling comes through frustration which left me in this business for seven or eight years 4 .

12.22. 0

Note 22 Plus for a long time, perhaps, since I decided to apply for admission to National Center for Scientific Research, and end as a teaching activity at university silence, which in recent years has become increasingly problematic.

4 Compare also footnote (23iv) added later.

241

12. NOTES for the first part of "CROP AND SEMAILLES"

12.23. 0

Note 22

Even after 1970, when my interest in math became sporadic and marginal in my life, I do not think there has been used i@e challenged myself, when a student was using me to work with him. I can even say that apart from two or three cases, the interest of my students after 1970 for the work they did was far short of my own interest in them, even in the periods where I was concerned about little math on days when I set foot in college. Also the kind of I had to availability

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my students before 1970, and the extreme demands in work that was a sign

p. 153

Main, would they have had no vis-à-vis the meaning of most of my future students, who were math without conviction, for a continual effort they should have done on themselves. . .

#### 12.24. The child and the master

**Note 23** The term "pass" here does not really match the reality of things, which reminds me a more modest attitude. This rigor is not a thing that can be transmitted, but at most wake or encourage, as she is ignored or discouraged from an early age, the family environment also although by the school and the university. As far as I can remember, this rigor was present in my quests, those of an intellectual nature, at least, and I do not think she was sent by me my parents, let alone master, school or mathematicians among my elders. It seems to me be part of the attributes of **innocence** and thus, things that are assigned to each birth. This innocence very early "to see green and not ripe", which it is obliged to plunge more or less deep, and often it does appear hardly trace in the rest of life. At home, for reasons I have not yet thought to sound, a certain innocence survived relatively innocuous level intellectual curiosity, while elsewhere it plunged deep, seen or experienced! as in all world. Perhaps the secret, or rather the mystery, of "teaching" in the full sense of the term, is to find contact with that innocence disappeared appearance. But there is no question of finding this contact the student, if it is already present or first found in the person of the teacher himself. And what is "Transmitted" then the teacher to the student is not at this rigor or innocence (innate in the one and the other), but a respect, a tacit appreciation for this thing commonly rejected.

12.25. 0

**Note 23**

He had yet there for seven or eight years another "frustrating" column in my mathematician of life, but that is expressed over the years much more discreetly. She eventually become apparent by a repeat because of persistent accumulation of the same type of situation "frustrating" in my teaching activity, and finally burst into a kind of "ras-le-bol", making me stop virtually any said activity of

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"Research direction." I touch this issue once or twice

p. 154

During my reflection, to finally examine at least so slightly at the very end. I describe at least frustration, and examines the role which played in my "back to the math" (see para 50. "weight of the past").  
242

12.26. Fear play

#### 12.26. Fear play

**Note 23 "**

This student had worked with me on a "course work" DEA for a year, and is remained "contracted" in his working relationship with me until the end. It was a frank friendship, crossed by a mutual sympathy that could be no doubt. Yet there was this "stage fright"; that fear that the real cause was certainly not a fear to my person, even though it was taking appearance. I do not maybe would@ even seen the thing, if this student had told me about himself, presumably to "explain" more or less the result of a nearly complete blockage in his current job year.

As has happened with other students who, like him, faint at first some

Geometric substance, blocking manifested from the moment it was to make a "work room"

So put black on white forward-fit, or just grasp the meaning and significance of those

I provided and I proposed to accept as the basis of language, such as "rule of the game." The

reflexes "school" almost always grow the student faced with a situation where it is supposed to "make search "to adopt as a" given "to both blur and imperative" rules of the game "that are implied transmitted by the Master, and that it is certainly not to try to explain, much less understand.

The concrete form taken by these implicit rules are the "recipes" semantic or calculation, on the

model Mole books say (or any other current instruction book). The student expects more of

a task master of the form "show that...", which was the only form of "reflection" that mathematics

has encountered in its past experience. (I do not also believe that the provisions of most

professional mathematicians, and other scientists, too, are essentially different - to

except that the "master" is replaced by "consensus" that sets the rules of the game of the moment and consider the

as some immutable. This consensus also sets what the "problems" that this is resolved,

between which everyone feels free to choose his liking, even for changing over

of his

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work, or even invent others. . . ). I noticed that the entirely different attitude p. 155 is mine vis-à-vis a mathematical substance that it is sound and therefore also vis-à-vis the student, triggers almost certainly disarray, one of the signs is anxiety. Like any anxiety, it will tend to have a face to project on a "reason" Outside, plausible or not. One of the faces The most common anxiety is precisely fear. Such difficulties are hardly presented himself in the first period of my teaching activity, except Perhaps in both cases where a "teacher-student" does not continue beyond a few weeks, and maybe (I can not tell) in the case of "student sad," perhaps felt "glued" to a topic that inspired the way, while he yet was free to change. In the case of the student (Which I have also spoken) which remained afflicted with some jitters for long, it is clear that the reason is elsewhere. It was by no means stuck in his work, but rather perfectly comfortable with the theme he had chosen, on which he made a major foundation work. Most of my students of this period were also former students of the Ecole Normale, and their contacts with them Henri Cartan had already shown the example of another "mathematical approach. At the opposite end (so say) of these, in my second time as a teacher at the University of Montpellier is among freshmen that anxiety which I spoke the least interfered with a process of reflection. For many of these students, the surprise at a different approach did not cause anguish or neither closure, but to open and go to, for once, interesting things! According to my observations, the effect of several years of college on student creativity provisions is radical and devastating. It is a strange thing that in this respect the effect of long high school years seems relatively

243

## 12. NOTES for the first part of "CROP AND SEMAILLES"

trivial. The reason perhaps is that years of college are placed at an age when the innate creativity we **must** end for purposes to express a personal work, otherwise wrecked forever, at least at a creative work of an intellectual nature. This is surely a healthy instinct for my student years (college Montpellier also) I almost failed to set foot in course, devoting almost all of my energy to mathematical thinking per

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sonal.

p. 156

### 12.27. The two brothers

Note 23 "

Antagonism in this student took the form from the outset a "class antagonism": I was the "Patron" who had "power of life and death" on his mathematical future, which I could decide according to my have fun. . . Of course, the event could only confirm this view, since I have been quick to put end my responsibilities (become painful) vis-à-vis the student. This put him in a difficult situation, in these times where it's not so easy to find a "boss", especially when the subject is already selected. At the other student, frustrated in their legitimate expectations, the antagonism took a similar form. I felt like the "Mandarin" tyrannical, which can not tolerate contradiction from those (Students or lower-ranking colleagues) he considers his subordinates.

Such "class attitude" never manifested, however little it may be, in relation to my Students of the first period. The obvious reason is that in the situation before 1970, it was no doubt that the student, once his former thesis, would have a lectureship position, and thus would enjoy an identical status to mine, that of "university professor". loquacious figures: the eleven students started working with me before 1970 had completed soon lecturers positions their work, while none of the twenty students who worked more or less under my leadership had Access to such a position. It is true that only two of them were motivated enough to make a thesis State doctorate (also excellent for one and for the other).

It is therefore not surprisingly so in this second period, certain ambivalence (whose origin remained hidden deep) took the form of a class antagonism, mistrust (presented and felt as "visceral") vis-a-vis the "boss". For those who had more or less out as an student of friendly relations continued for a decade without antagonist episode appearance, yet marked by the same ambiguity, speaking through an attitude of mistrust, held "in reserve" behind a manifest sympathy. I have actually never been fooled by this "suspicion" command, which appeared to me especially as a reason that this friend believes good to give himself not to venture out of the well-defined area that has

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has chosen as his own, in his professional life as in his life all

p. 157

Short - (! except at most himself) thing he is free to do yet no one asks him

accounts. . .

These three cases are the only ones in all my teaching experience, where some ambivalence in the relationship between a student (or someone who more or less do figure student) and I will be expressed a "class attitude". This attitude is particularly ambiguous when it occurs colleagues in a "body" university where they enjoy one another and exorbitant privileges comparison of the situation of ordinary people, privilege which show differences in rank (and wages) as relatively insignificant. I noticed also that these attitudes disappear like by magic (and for good reason) as soon as the person concerned was promoted itself to the situation the day before yet he complained to others.

I also detected a similar ambiguity in most, if not all, situations of conflict which I

244

### 12.28. Failed to education (1)

have witnessed within the mathematical world (and often beyond). Those "boxes" that their rank or may not correspond to their expectations (justified or not), enjoy pretty incredible privileges, no other profession or career can offer. Those boxes are not aspire to the same safety and the same privileges (which does not necessarily prevent them from interest in math themselves, and sometimes make beautiful things). For these times where competition is tight to squeeze and where non-cased often treated layabout: I have more than once felt the connivance between the one who Please humiliate, and one who is humiliated - and swallowing and crashed. The real object of his bitterness and his animosity is **not** one that makes use of a power, but is none other than **himself**, that crashed and who invested the other of the power he uses to pleasure. One who likes to humiliate it is also taking it and compensates hand (without erasing it...) a long humiliation and long buried and forgotten. And he who grants his own humiliation is his brother and rival, who secretly envy and buried the bitterness and humiliation, and the humble message itself it for him.

### 12.28. Failed to education (1)

**Note 23 iv** Since these lines were written, I had the opportunity to speak

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with two of my former students p. 158

after 1970, to try to probe them with the reason for the failure of my teaching at re-looking at the University of Montpellier. They told me that I had the propensity to underestimate difficulty there that could represent for them the assimilation of such techniques familiar to me, but not for them, had a discouraging effect on them because they felt constantly short of the expectation that I had vis-a-vis them. In addition (something that seems to me a greater range yet), they arrived they feel frustrated when I tell them "was selling wick" giving them a health statement I had in my sleeves, instead of letting them discover the fun of their own, at a time when they were already nearby. After that, he did them remained to do "exercise" (not the passion otherwise) of prove the statement in question. Here stands the "lack of sensitivity" in me that I had found in an earlier note (Note 21) without extending me more about it. It is such disappointments, above all, represent my personal contribution in the disappearance of research interest in one and the other, after yet excellent start.

I realize that I was not more generous before 1970 than after. If I did not have the same difficulties then it is probably the kind of students who came to me at that time were quite motivated to find the same charm to a "long period", which was an opportunity to learn the craft and many things along the way; and also, for a start statement that I "was selling wick" to generate their own a slew of others that went well beyond the first. When I changed place of teaching activity, I made the adjustment that was needed in the choice of discussion topics that I proposed to my new students, through the choice of mathematical objects which could be seized by immediate intuition, regardless of any technical background. But this adjustment was essential for itself insufficient, due to differences in **provisions** (in my new students compared to old), more importa1, yet your only difference **luggage**. This ties besides finding made earlier (early par.25) over a failure in me for the role of "master", which is emerged so much stronger in my second period as a teacher, as in the first.

### 12.29. 0

245

## 12. NOTES for the first part of "CROP AND SEMAILLES"

**Note 23v**

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A particularly striking sign of this difference was manifested on the occasion of "episode

p. 159

foreigners ", which I have had occasion to speak (section 24). So I then received sym testimonials  
pathy from many people who were completely foreign to me, I do not remember any  
my students before 1970 is thought to occur in this sense, and even less to offer me assistance  
in any action in which I had committed. By cons, it seems to me that there are none of my  
students or ex-students of the second period which has expressed to me his sympathy and solidarity, and many will  
are actively involved in the campaign I was leading at the local level. Beyond this inner circle, the case  
the 1945 law also created some excitement among many students of the Faculty  
who knew me no more than name, and he came to many Courthouse Day  
my quote to show their solidarity. The latter circumstance suggests, moreover, that the difference  
I found between the attitudes of my students "before" and "after" 1970 expresses perhaps the least  
Unlike the **relationship** between me and them, that a difference in **mentality** . Obviously, my students "before"  
became important people, and it takes a lot to the important people agree  
to be moved ... But the episode of my departure from the IHES in 1970 and my commitment in action  
activist suggests that there is not it. This was a time when none of them was still  
figure so important person, and yet I do not remember any of them have expressed a  
any interest in the business in which I was getting into. I think rather that it had to put trouble  
comfortable, without exception. This goes further in the direction of a different mentality, but can not  
be blamed on the only difference in social status.

**12.30. 0**

**Note 24** Ethics which I refer is equally applicable to any other medium formed around an activity  
research, and where therefore the opportunity to present its results and reap the credit; is a  
question "life or death" for the status of any member or even "survival" as a member  
this environment, with all the consequences this implies for him and his family.

**12.31. ethical consensus - and control of information**

**Note 25**

Apart from the conversation with Dieudonné, I do not remember a conversation that I have  
been involved or witnessed during my life math

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matician, where it was question of professional ethics,

p. 160

"rules of the game" in relations between members of the profession. (I except here the discussions about  
the scientists working with military aircraft, which took place at the beginning of the 70 round  
the movement "Surviving and Living". They do not really concerned relations between mathematicians  
them. Many of my friends in Surviving and Living, including Chevalley and Guedj, also felt that  
I was putting the emphasis at that time, especially in the beginning, this question I was particularly  
awareness, m @way from more critical everyday realities, precisely the type of those I examined  
in this thinking.) There was never any question of these things between a student and me. The tacit consensus  
I merely believe in this one rule, not to present as his own ideas of others which could have  
knowledge. This is a consensus, to me it seems, that has existed since ancient times and has been challenged in  
No scientific community until today. But in the absence of that other complementary rule, which  
guarantees every researcher the opportunity to express their ideas and results, the first rule is letter  
dead. In the scientific world today, men in positions of prestige and power hold

246

**12.32. 0**

discretionary control of scientific information. This control is more temperate in the middle that  
I had known, by consensus like the one spoke Dieudonne, which perhaps never existed  
outside the small group of which he was the spokesman. The scientist in a position to receive prac-  
cally all the information it deems necessary for receiving (and often beyond) and has power to a  
Much of this information to prevent the publication while keeping the benefit of information  
and dismissed as "irrelevant", "more or less well known", "trivial", etc. . . I return to this situation  
Note (27).

**12.32. 0**

**Note 26** "founding members" of Bourbaki are Henri Cartan, Claude Chevalley, Jean Delsarte, Jean  
Dieudonné. André Weil. They are all alive, except Delsarte, carried away by the age in years  
fifty at a time so that professional ethics was still generally respected.

In reading the text, I have been tempted to remove this passage, in which I can give the impression  
to issue certificates of "probity" (or not clean) which concerned have no use, and he  
not my responsibility

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to do. Provided that this passage can raise is surely justified. I nevertheless retains, p. 161

to keep the authenticity of the testimony, and because this way restores indeed my feelings, even if thereof are moved.

### 12.33. The "snobbery of youth" or advocates

#### purity

**Note 27** Ronnie Brown told me of a reflection of JHC Whitehead (he was student), speaking the "snobbery youth who believe: that a theorem is trivial because its proof is trivial."

Many of my old friends would do well to ponder these words. This "snobbery" - there is today not limited to the young, and I know more than a prestigious mathematician who practices fluently.

I am particularly sensitive, because I did better in math (and elsewhere too...), The

concepts and structures that I have introduced that I find the most fruitful, and essential properties

I could identify a patient and persistent work, all fall under this description of "trivial". (None of

these things would have had our chance to see day to accept a note to the CR, if the author was already a celebrity!) My ambition mathematician my life, or rather my passion and my joy were

constantly **find the obvious things** , and this is my only ambition also in this book (there

included in this introductory chapter. . . ) The decisive thing often is already seeing the **issue** that

had not been seen (whatever the answer, and that it is already found or not) or to reach a statement (it was speculative) that summarizes and contain a situation that had not been seen or not understood;

if it is shown, regardless of whether the demonstration is trivial or not, entirely incidental thing, or

even that early and provisional demonstration proves false. The snobbery of which is that Whitehead speaks

the jaded rake who deigns not enjoy a wine only after ensuring that it was very expensive. More than one time

in recent years, taken over by access my old passion, I offered what I had better, for

see it rejected by this complacency there. I felt a pain that stays alive, joy found herself disappointed -

but I am not on the street so far, and I did not try, fortunately for me, to cram an item in my composition.

247

### 12. NOTES for the first part of "CROP AND SEMAILLES"

The snobbery which Whitehead speaks is an abuse of power and dishonesty, not only insensitivity or closure to the beauty of things, when exercised by a man of power against

a researcher at the sea

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, on which he has discretion to assimilate and use the ideas, while blocking their pub-

p. 162

lication pretext that they are "obvious" or "trivial" and therefore "irrelevant". I do not even dream

By the extreme situation of plagiarism in the usual sense of the term, which must still be very rare in the middle mathematics. Yet the practical point of view the situation is the same for the researcher who made the

fresh, and the inner attitude that makes possible does not seem to me not much different. It is simply

more comfortable, then it is accompanied by the feeling of infinite superiority over others, and good

conscience and the intimate satisfaction of one who poses as intransigent defender of the intangible purity

mathematical.

#### 12.34. 0

**Note 28** In writing the preceding pages, I had initially been divided between the desire to "off my chest," and concern reserve or discretion. So I stayed in at nearly, which was probably the main reason

My uneasiness, the feeling that "I learned nothing." Since the lines were noting that discomfort

written, I rewrote twice those pages that had left me on an inner discontent, involving me

clearer and more by going to the bottom of things. Along the way I have indeed come to "learn from

thing, "and I also believe at the same time I was able to put his finger on something important, which

both exceed this case my own person.

#### 12.35. 0

**Score 29** I am talking here of intense investment and long-term in the mathematical, or

another entirely intellectual activity. For cons, the deployment of such passion, which can be a

how to get reacquainted with a forgotten us strength, and the opportunity to compete in a substance

reluctant and along the way also to renew and enrich our sense of identity with something that

we either really personal - such deployment may well be an important step in a route

indoors in a ripening.

#### 12.36. 0

#### Note 30

In recent years, these are my children who have taken over, to teach a student

sometimes reluctant mysteries of human existence. . .

#### 12.37. 0

**Note 31** I refer to as "yang" of the desire to know - the one that probe,

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discovers, names what

p. 163

appears. . . It is being **called** makes the irreversible appeared aware indelible (even she would subsequently to be buried, forgotten, it would cease to be active. . . ). The shape "yin", "Feminine" "the desire for knowledge is an opening, receptivity, in a quiet home a

248

12.38. Hundred irons in the fire, or Nothing serves to dry!

knowledge appearing in the deeper layers of our being in which thought has no access. The apparition of such an opening, and a sudden knowledge that for a time erases all traces of conflict comes as a grace yet, which touches deep while its visible effect may be short-lived. I suspect Yet this knowledge without words that comes to us as well, in some rare moments of our life, equally indelible, and action continues even beyond the memory that we can have.

**12.38. Hundred irons in the fire, or Nothing serves to dry!**

**Note 32**

At the time when I was still doing the functional analysis, so until 1954 I happened to I persist endlessly about a question I could not solve, even though I had more ideas and was content to turn around in the circle of old ideas that obviously does not "biting" more. It has been so in all cases for a whole year for the "approximation problem" in the spaces including topological vector, which would be solved twenty years later only by methods of an entirely different order, which could only escape to the point where I was. I was moved then, not by desire but by a stubbornness and ignorance of what was happening in me. It was a difficult year - the only time in my life when doing math had become painful for me! He had me took this experience to understand that no use of "dry" - that from the moment a work arrived at a breakpoint, and soon perceived judgment, it must move on - and come back at a time more conducive to the question left open. This time almost always does not take long to appear - this is a maturing of the matter without me do mine to touch solely by virtue of a labor of enthusiasm on issues that may seem to have no connection with that one. I am convinced that if I persisted me then, I get anywhere even in ten years! It was in 1954 that I got used to math to always have many irons in fire there at the same time. I only work on one of them at once, but by a kind of miracle which renews itself constantly, the work I do on a

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also benefits p. 164

all others, waiting their time. This was the same, without any deliberate on my part, on my first contact with meditation - the number of burning issues to consider increasing day went by day, gradually as the reflection continued. . .

**12.39. 0**

**Note 33** This does not mean that the moments of work where the paper (or the blackboard, which is a va-Laughing! is absent, are important in mathematical work. This is so especially in "moments sensitive "where a new intuition just appeared, when it comes to" get acquainted "with it a More generally, more intuitive than a "work room", that this informal stage of reflection prepared. At home, this kind of thinking is mostly in bed or walk, and I think it represents a relatively small share of the total time of work. The same observations apply equally the work of meditation as I practiced so far.

**12.40. The powerless embrace**

**Note 34**

The word "embrace" is not for me just a metaphor, and the common language here is a reflection of a profound identity. We can say, with some justification, that it is not true then that the hug

249

12. NOTES for the first part of "CROP AND SEMAILLES"

no wonder is powerless - that the land would otherwise depopulated desert, if it were so under literal. The extreme case is that of rape, where wonder is certainly absent, then it happens that be is procreated in the raped woman. Surely the child born of such hugs can not fail to bring the brand, which will be part of the "package" it receives and shares its responsibility to assume; this will prevent a new being is indeed conceived and born. there has been **created** , a sign of **power** . And he is also true that sometimes as a mathematician I have seen full of conceit, and is proving attractive theorems, signs of an embrace that has not failed to force! But it is also true that if the life of such mathematician is stifled by its sufficiency (as was the case to some extent in my own life, at one time), the fruits of those hugs with mathematics is a benefit for himself or

no one. And the same can be said of the father as the mother of a child born of rape. If I talk about "hug powerless" I mean primarily the inability to generate a **renewal** for one who believes: create, while it creates a **product**, something external to it, without deep resonance in itself; a  
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product which, far from release, to create harmony in it binds more tightly to the conceit in him which he is  
p. 165

prisoner, who constantly pushes him to produce and reproduce. This is one form of impotence at a level deep, behind the appearance of a "creativity" which is basically a **productivity** without brake. I had ample opportunity also to realize that the sufficiency of wonder disability, is in the nature of a real blindness, a blockage of a sensitivity and a natural flair; if not total blockage and permanent, at least in some species manifest situations. This is a state where such a mathematician prestigious sometimes proves, in the same things which he excels, as stupid as most stubborn schoolchildren! In other times it will do wonders technical virtuosity. I doubt, however it is still in a state of discover it simple and obvious that power to renew a discipline or science. They are too far below him that he still deigns to see them! To see what no one deigns to see, you have an innocence he lost or banned. . . It is no coincidence surely, with increasing prodigious mathematical production within the last twenty years, and the profusion déroutant new results which is seen submerged mathematician who would simply "to keep current" so little, that little has yet (as far as I can judge by the echoes that me succeed here and there) to **renew** true, of large-scale processing (not just by accumulation) none of the major themes of reflection which I was so little familiar. the renewal ment is not quantitative thing, it is foreign to an investment amount, measured in a number days of mathematicians devoted to that subject by such mathematicians as "level". A million-days mathematicians is powerless to give birth to such a childish thing as zero, which renewed our perception of the number. Only innocence has this power, which is a visible sign of wonder. . .

12.41. 0

Note 35

This "gift" is the person of privilege, we are all born with. When it seems absent in me is that I myself have driven, and it's up to me to welcome him back. At home or such a man, this "gift" is expressed in way different than in another, less communicatively less perhaps irresistible, but it is nonetheless present, and I can not tell if it is less respect.

12.42. 0

Note 36

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Such delicate sensitivity to beauty seems intimately related to something I had

p. 166

250

12.43. 0

opportunity to speak in the name of "requirement" (itself vis-à-vis) or "rigor" (in the full sense of the term), that I described as "attention to something delicate in ourselves", attention to quality understanding of the survey thing. This quality of **understanding** of a mathematical thing can be separated from a perception more or less intimate, more or less perfect "beauty" peculiar to this thing.

12.43. 0

Note 37 It is hardly necessary to add, I think that this long process has shown, the day to day, much more than even the "result" I just indulge in pithy form. This does not otherwise for work of meditation for mathematical work motivated by a particular issue we proposed to examine. Often followed the vicissitudes of the road (leading or not leading to a more or less complete clarification of the original question) are more interesting than the original question or the "end result".

12.44. 0

Note 38

These notes were in fact a continuation of the long letter ..., which became the first chapter. They were typed to be legible for that friend of old, and two or three others (Including especially Ronnie Brown) that I thought might be interested. This letter also never received a response, and it has not been read by the recipient, who almost a year after (my question if he had well received) showed genuinely surprised that I could even think for a moment that he could read it, saw the kind of mathematics that we should expect from me. . .

12.45. 0

Note 39 This is the period, among others, the "Long March through Galois theory", which he is issue in "Sketch of a Program" (para 3: "Body numbers associated with a child's drawing").



## 12.46. Visit

**Note 40** The work on this dream is the subject of a long letter in English, a friend and colleague who had visited me in gale yesterday. Some of the materials used by the Dreamer, to bring out a seeming nothingness that dream of a striking realism, were obviously borrowed from this short episode of the visit a dear friend whom I had not seen for almost ten years. aus

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if the first day of work and against p. 167

my past experience, I thought I could conclude that the dream that came to me concerned my friend more it does concern me - it©him who should have that dream and not me! It was a way to evade message of the dream that (I should have known from the start by my past experience) only concerned none other than me. I ended up realizing it in the hurt that followed this first phase, superficial work; I returned the next day in the same letter. I have not received since that memorable letter; sign of life this friend, one of the closest I have had.

251

## 12. NOTES for the first part of "CROP AND SEMAILLES"

This work was the only meditation that took form letter (and English to boot) and that therefore I have no paper trail. This episode struck me particularly, among many others show how any sign of work that goes beyond a certain facade, and that leads to all day simple facts, but that usually makes a point to ignore - how any such work points inspires unease and fear in others. I come back to that later (see para. 47, "The solitary adventure").

### 12.47. Krishnamurti, or release become hindrance

**Note 41** It would be inaccurate to say that the only thing I learned from this reading is a certain vocabulary, and a propensity to do mine and eventually substitute, just as in reality. If reading the Krishnamurti first book I had in my hands was so struck (and still have I had the time to read a few chapters), it is because what he said completely hustled number of things that for me were the self, which I reported to me as soon as they were **commonplaces** that had has always been part of the air that I breathed. At the same time, this reading drew my attention to the first bec, on facts of great significance, especially that of the flight from the reality, as a conditionings of the mind the most powerful and universal. That gave me an essential key to understand situations that previously were incomprehensible and therefore (without me knowing account before the discovery of meditation five or six years later) generating anxiety. I could notice immediately the reality of this trailing all around me. This unwound some anxieties, but without change anything essential, because I did not see this reality in others, while

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given me (as a matter of

p. 168

itself) it did not exist in myself, that I was in fact the exception that proved the rule (and without me ask any other question about this truly remarkable exception). In fact, I was in no curious or others or myself. This "key" can **open up** in the hands of the lively desire to penetrate. In my hands it became exorcism and poses.

It was in early 1974 that for the first time I went to the evidence that the destruction in my life, not following me not, could not come **as** the others, there was something **in me** that attracted, the fed, the perpetuated. It was a moment of humility and openness, conducive to a renewal. It then remained peripheral and ephemeral yet, for lack of a **work** in depth. That "something in me" was still vague. I could see that it was the lack of love, but the idea of a work that would identify more closely where and how there had been a lack of love in me, how it is manifested, What were its practical effects, etc ... - such an idea could come to me or any media or people I had known to date, or Krishnamurti. (Instead, K. likes to insist on the vanity of all work automatically equates with "munchies becoming" of me.) So, with a "wisdom" of borrowing for any compass, I saw nothing else to do than wait patiently "Love" down in me like a grace of the Holy Spirit.

Yet the humble truth that I had just learned to end trough of a wave sparked the rise of a powerful new wave of energy, comparable to that which was to carry two and a half later my pre-Mière launched in meditation. This energy then has not remained completely unutilized. Some months later then ! I was immobilized by a providential accident, she wore a reflection (written) where for the first time in my life, I was examining the worldview that was the unspoken basis of my relationship others, who came to me from my parents, especially my mother. I realized then clearly that this vision had failed, she was unable to account for the reality of relationships, and promote development of my person and my relationships with others. This thinking is still marked

252

12.48. The healthy tear

by "Krishnamurti style" and also by the taboo krishnamurtien on any real **work** towards understanding.

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But she has made tangible and irreversible knowledge born a few months before, remained p. 169  
First vague and elusive. This knowledge, no book or other person in the world could then bring it to me.

For quality of meditation was missing especially in this reflection The look on my own person my **vision of myself**, not only my world, on a system of axioms, therefore I not really figured "in the flesh". Also missing there, looking on myself in **the moment**, to moment of reflection (which fell short of a true work); look that would have made me also detect nothing a borrowed style, a certain complacency in the literary aspect of these notes, so a lack spontaneity, authenticity. Any insufficient as it is, and relatively limited in scope effects Immediate on my relationships with others, yet this reflection seems to me a step, probably necessary because the starting point, to the deepest renewal to be held two years later. Then finally I discovered meditation - discovering this first unsuspected fact: **there were things to discover on my own person** - things that determined the way of almost complete my life and the nature of my relationship to others. . .

#### 12.48. The healthy tear

**Note 42** "Event" punchy "in question was the discovery at the end of 1969, that the institution of which I felt to be part was partially financed by funds from the Ministry armies, something that was incompatible with my basic axioms (and is in fact even today). This event was the first in a string of other (more revealing than each other!) That have: had the effect; I left the IHES (Institute of Advanced Scientific Studies), and needle thread radical change of environment and investments.

During the heroic years of IHES, Dieudonne and I have been the only members, and only also give it credibility and audience in the scientific world, Dieudonné by editing the "Publications Mathematics": the first volume was published in 1959, the year that followed that of the foundation of the IHES Motchane by Leo) and me by "Algebraic Geometry Seminar". In those early years, the existence of IHES remained more

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precarious, with uncertain funding (through the generosity of a few p. 170 companies acting as sponsors) and with only a local paid room (with a bad mood visible) by the Thiers Foundation in Paris for the days of my seminar 5. I felt a bit like a founder "scientific", with Dieudonné, my home institution, which I intend to finish my there days! I finally identify myself strongly to IHES, and my departure (as a result of indifference colleague) was seen as a sort of pull to another "home", before revealing as a liberation.

Looking back, I realize that I should already be in me a need of renewal, I not say since when. This is surely not a coincidence that the year before my departure the IHES, there was a sudden tilting my energy investment, leaving out the tasks that the Eve still burning in my hands, and questions that fascinated me most, to launch myself (under the influence of a biologist friend, Mircea Dumitrescu) in biology. I threw myself in the provisions of a 5 A recent brochure published by the IHES on the occasion of the anniversary of twenty-five years of its foundation (including Nico had Kniper kind enough to send me a copy) breath word of these difficult beginnings, considered perhaps unworthy of solemnity occasionally celebrated with great fanfare last year.

253

12. NOTES for the first part of "CROP AND SEMAILLES"

long-term investment in the IHES (which was consistent with the multidisciplinary vocation this institution). Surely it was only an outlet to the need for renewal more pro-background, that could not be accomplished in the mood of "scientific incubator" of IHES, and that was done over This "wake cascade" to which I have already alluded. There were seven, the last of which occurred in 1982. The episode of "military funds" was providential triggering the first of these "awakenings". The Ministry of armed, like my former colleagues at the IHES, finally had the right to my gratitude!

12.49. 0

**Note 43** "The poetic work of my composition" contains a lot of things that I know first hand, and now strike me as equally important in my life, "in life" in general, that when it was written with the intention to publish it. If I have refrained myself, mostly because I went later realize that the form was afflicted by a deliberately "making poetic"

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ble too constructed, and many passages, lack spontaneity, the

p. 171

the point at times of stiff or painful swelling. This form, bombastic at times, was a reflection of my provisions, which definitely is the "boss" often leading dance - heavily it goes without saying. . .

**12.50. 0**

**Note 44**

It goes without saying that I do here aside from the assumption, not improbable to say the least, of the unexpected outbreak of nuclear war or another celebration like that, likely to end abruptly and once and for all the collective game called "Mathematics", and something else with. . .

254