It is a great pleasure to respond to these most interesting remarks of my old friend Pierre-Michel Menger. Actually, the old one is I, by five years, and I shall illustrate my doddering age by giving you a speech instead of Pierre-Michel's youthful powerpoints. I am however responding to those powerpoints, which are much more ambiguous than either oration or text, and so I apologize in advance for the probable misfit between my comments and the talk he has actually given. I'm reacting to one of the talks he might have given from these powerpoints.

I find Pierre-Michel’s ideas challenging and important. But of course it is my job to question the whole thing. Is his talk, really, a general account of creative undertakings, as Pierre-Michel's first slide has it or of "artistic" work as his second slide states? There is no question about the answer to this question - it is not such a general account. Pierre-Michel knows that as well as I do. The reason we need scope conditions is obvious. Work that we today call “artistic” or “creative” has been produced by lots of societies that did not or do not have the category of creativity as it is deployed – and taken for granted - in Pierre-Michel's presentation: societies, that is, that did not have the category of creativity in the sense characteristic of the modern west since the coming of romanticism. The entire idea of a special kind of symbolic labor, which involves special modes of thought and experience, is something made up in Europe in the late eighteenth and early nineteenth centuries. We know that. The question is what are the implications of knowing that, and what we ought to make of them? Is the whole modern idea of creativity simply a mistake or an ideology? Is it a significant new category of human experience that can become general? Is it simply a fancy label for a quality
that is fractally present in all forms of human symbolic endeavor? These are the questions I want to raise. But first, I need to persuade you that the whole idea that creative work exists as a special form of work is largely a nineteenth century creation.

So let's begin with one of the original creative geniuses made up by the nineteenth century Europeans, Wolfgang Amadeus Mozart. We know that at Mozart's early death, his financial affairs were in disarray, and that his widow made a living in part by selling manuscripts and assiduously cultivating the idea of a noble genius struck down in the prime of life. This image was of course already available. Goethe had made up one version of it in the *Sorrows of the Young Werther*, although to be sure like many of the early romantics - William Wordsworth is another good example - Goethe himself shed his original pose of youthful genius and lived a long and sober work life after his flirtation with the *Sturm und Drang*. But Werther got the whole intense genius idea started. And the image of Mozart - and indeed the artistic product of Mozart - was used by many writers to further the cult of the romantic, the special, the intensely emotional nature of artistic work. E. T. A. Hoffman's Gothic story about Donna Anna visiting him in his private box during the intermission of *Don Giovanni* is a celebrated example.

But Mozart himself did not think of his works as the masterpieces of a genius in the sense in which we use that word. He was a busy working musician, teaching students when he could get them, conducting performances, developing pieces, and often modifying existing pieces to deal with problematic situations like the inability (or unwillingness) of the Vienna Don Ottavio to sing the aria "Il Mio Tesoro," or the need of the Viennese audience to have a happy ending tacked on after the splendid plagal cadence that sends Don Giovanni to his well-deserved damnation. As for Mozart's supposed transcendent skills, many of the qualities of
"genius" for which Mozart became well known in the nineteenth century were common skills of working musicians in the 18th century: memorizing music at a single hearing, writing whole pieces in their heads, and so on. Most of these men had been professional musicians since the age of seven or eight, first as singers, then later (when their voices changed) as keyboardists. It is little surprising that the best of them had what seem to us to be miraculous talents. But to themselves, they were craft workers. They knew perfectly well that some of their products were better than others and that they could be particularly proud of certain works. And no doubt Mozart himself was very proud that Haydn told Mozart's father Leopold that his son was the best composer in Europe. But 18th century musicians did not think of themselves as special, as set apart, as "creative," in some sense. That idea was rather the creation of the nineteenth century and the edgy continuations of romanticism into modernism - via Carlyle, Hoffman, Baudelaire, and company - who retrospectively tried to make craft musicians like Mozart into the geniuses they imagined themselves to be. Even among the nineteenth century musicians, the contrast is clear between Brahms and Wagner - the former a great craftsman, consummate technician, and profound melodist, the latter an egomaniac with a wonderful ear, a fantasy of emotionalized art, and a willingness to transmogrify the tawdry affairs of his own life into plots with mythological pretensions.

This nineteenth century idea of creativity resurfaces from time to time throughout the Pierre-Michel's talk. Thus, slide 17 with its list of great researchers into creativity is yet another proof that the obsession with creativity and greatness was a nineteenth century phenomenon. Every single researcher he mentions was a nineteenth century person. As of course was Francis Galton with his fascination for intelligence and genius.

Or take the more modern conception of "Day science, Night Science," mentioned on a slightly later slide. This is all mystagogery. There's no necessary
association between wonderful ideas and special times of day or halves of the brain or any of that nonsense. To be sure, I have my major ideas when my mind is relaxed, but perhaps it is just that when I am relaxed I am willing to recognize everyday thoughts as major ideas. That is, perhaps it's not about the ideas at all, or the flow, or all that jazz, but rather simply that during relaxed time - for me it is usually in the shower - one is willing to set aside all the criticisms and limitings that prevent one from taking every day thoughts with full seriousness. That is, the whole thing may have nothing to do with thought at all, but everything to do with how we FEEL about our thoughts.

Or take slide 19 with its assertion from Valery that rigorous work is measured by the number of refusals, of options rejected. This too is pretension. Valery was himself a militant proponent of the genius view of symbolic activity, his first major work having been a study of an autonomous fictitious intellectual - M. Teste - who after long silence and immense effort solves all the great problems of the spirit by hard solitary work, by pure reflection, by deep asceticism. A character further from the worldly Mozart or Handel cannot be imagined. Or from a painter like J. M. W. Turner who produced so many paintings for so many patrons and galleries. Such craft artists were the complete reverse of the perfectionist Flaubert or the almost theatrically tortured Baudelaire, who were the kinds of models Valery had in mind.

Pierre-Michel next takes us to sketches and outlines, the preliminary frameworks from which and through which the great works are developed. To know them, he tells us, deepens our appreciation of those great works. But this too is 19th century nonsense. Are these sketches and outlines actually important? Or are they just more idols to helps us worship the god-like masterpieces. Aren't they just another part of the myth of the "perfect work" - the agony that went into it, the many refusals to compromise, the willingness to face hardship and poverty, etc.
One cannot but see in the mind’s eye the garret of "La Boheme," where passionate poets hit high C's (well, B flats, actually) for the benefit of the tubercular girl friend. But in fact, as Harrison White and many others have shown, many painters of the 19th century genius period churned out canvases, just as Handel and his Baroque contemporaries had churned out music. Indeed, one of reasons for the relative absence of outlines and sketches from the pre-romantic period in music was the quasi-improvisational character of the music. A town Music Director like C. P. E. Bach in Hamburg was conducting 300 performances a year, all of it new music. Such men had to write new music at a frightening rate. In fact, they could and did simply make it up on the spot - the works we know today as the Handel organ concerti began life as improvisations, as did Bach’s “Musical Offering.” When you’ve been a professional since age 7 (although Handel was one of the rare 18th century musicians who had not been a child professional) you can improvise works of a technical complexity that no twentieth century composer could possibly manage after years of music school. Again, this is a matter of hard trained craft, not of genius.

But culmination of this 19th century view is the Gombrich line quoted on slide 21. "The imperfection of perfection is a discovery of the 19th century." In fact this statement is precisely backwards. It was perfection that was the discovery - really the delusion - of the 19th century, and it was quite unsurprisingly followed by the banal discovery that - guess what - the works that had been presumed to be perfect were not so. Of course not. Before romanticism, everybody knew there was no such thing as the perfect artwork. Mozart knew quite well that his works - at least the operas - were not perfect, in the modern sense of unalterable or unchangeable. He wrote new arias for various singers, lowered keys, and made other performance modifications, as did most of his contemporaries. They were minor changes, but they were changes. It was rather Wagner the self-appointed
nineteenth century genius who demanded that his tenors perform roles that no human being could possibly sing, and, sure enough, the first tenor to sing Tristan died a month after the fourth performance.

The whole idea of the perfect artwork is basically a nineteenth century idea. It was then anachronistically applied to earlier works. Leonardo's La Gioconda, Bach's St. Matthew Passion, Milton's "Paradise Lost," even the works of Shakespeare: all of these were works by creators who saw themselves as craft workers and extremely good ones at that, but who didn't have the notion that they were special people, geniuses of the Wagner or Valery type. But in the nineteenth century, these undoubtedly magnificent products of the era of craft art were relabeled - as touchstone canonical works of unutterable genius - by the interpreters feeding and indeed creating the cultural tastes of the new bourgeoisie of the nineteenth century. By contrast, the eighteenth century view of Milton is captured in Samuel Johnson's famous quip that "no one ever wished it longer." Johnson's contemporary David Garrick had no problem rewriting Shakespeare to suit the eighteenth century London theater audience. No, it was not imperfection that was the great creation of the nineteenth century, but rather the idea of perfection in the first place.

So let us start from the premise that the whole idea of creativity and specialness that PM proposes is basically about 200 years old, and that this notion, which began in the arts, has been mythicized as the concept of innovation, creativity, and so on in many other realms, among them science and commercial life. In science studies, Robert Merton tried to kill the idea of the lone genius with his paper on scientific multiples, but it had little effect. That the vast majority of ideas and even scientific ideas are basically common property is not apparent to anybody but working scientists. As for the notion of commercial genius, I shall
come to it in a moment. But let us start from the scope condition. We are not
talking about a general phenomenon, but a phenomenon of the post-classical West.

Let me now characterize PM's argument as it applies within this limited
world. He has basically sketched an outline of how a certain kind of symbolic
production works. He calls this symbolic production "creativity," but doesn't really
define the word, probably because he himself knows quite well the argument I
have just made and knows that there isn't really a defensible universal definition of
creativity as a special activity. But all the same, he makes the reasonable
assumption that we are familiar with the 19th century notion of creativity, and that
like everybody in western societies since that time, we more or less believe in it.
He then goes on to tell us some qualities of this kind of symbolic production,
which he has studied in detail and on which he is an extremely reliable empirical
reporter. And he leads us to the conclusion that creative work is more easily
studied today than heretofore and that creative undertakings can help us think
about work more generally.

My historicization does not actually undercut PM's argument. Rather, it
suggests that Pierre-michel's approach - the idea of taking for granted the existence
of 19th century "genius-type" creativity and asking what we can say about it
theoretically and empirically - is probably one of several alternatives for thinking
about this peculiar modern phenomenon. So what are those alternatives?

The first, it seems to me, is that there is simply no such thing as creative
work, in the sense of a kind of work that is qualitatively different from other kinds
of work. Yes, there is assembly-line work and other forms of dominated,
meaningless labor. But set them aside for a moment. Once we do that, it seems
there is a perfectly reasonable hypothesis that all symbolic work is more or less the
same. That bricolage repair of the heating and electrical systems of an old house is
really no different from making a sculpture, that giving a patient a diagnosis and a
prognosis is no different from writing a prelude for piano, and that writing a speech to comment on a friend's work – as I have just done - is no different from writing *Moby Dick*. The scale may be different, but the nature of the work is not. That is, we could modify this insight slightly to argue that in some fractal sense, these things really all are the same. They have the same pieces and parts, they go together in the same order. They differ merely in degree, and the same processes that enable us to write short papers in college will provide the general templates and models for those of us who will create great written works.

I for one find this argument quite compelling. It has the processual virtue of making education into the foundation of later work. It has the intuitive feel of truth. And it certainly fits my own experience very well. It has also the moral virtue of connecting people at different levels of society instead of separating them into demigods and peasants. As the joke has it, a surgeon is just an overgrown plumber.

A second alternative argument is structural rather than substantive. The reason there are great artists is not genius but rather the fact that audiences and patrons imagine or impose status hierarchies, and that the mere existence of a status hierarchy implies the existence of people who will be at the top. This truth obtains about all kinds of status systems. There's no reason to think Bill Gates a genius - rather he was handed a government-protected monopoly on a silver platter. Whoever headed Microsoft was bound to do well. His success tells us little about his qualifications and talents other than that he knew how NOT to destroy his opportunity. Similarly, the mere probabilities imply that in every football season there will be a few undefeated teams. Are we surprised that people think their coaches to be geniuses? No – but are they geniuses? Well….. Similarly, there will be exactly 50% of schools with losing football records. That’s a structural fact. Does that mean that it is always the case that half the coaches are bad? No, it clearly does not.
So this is a purely chance theory of greatness. There's no need for genius at all. Chance just puts someone on top. Genius, after all, was just Galton's name for people who do well on intelligence tests. It had no other form of validation.

But one can also argue that hierarchies and statuses will emerge for information-theoretic grounds. Hierarchy helps handle overload. For example, having a canon of great writers reduces the people we need to read from an unmanageable many to a manageable few. Why should sociologists read only Marx, Durkheim, and Weber? There are dozens of other fine social thinkers. That we read those three is not so much because of their genius but because we can’t possibly read everyone, so a few have to be chosen, and for various random reasons, these are the winners. To put it more locally, are Pierre-Michel and I REALLY brilliant scholars, or are we at the College de France and the University of Chicago respectively just because someone has to be, and it happens to be us. After all, others have created the systems of work and symbols, the literatures, and so on with which we write our work. Could either of us create sociology out of whole cloth? No. No one ever did, one always does symbolic work in a community. And those who become leaders of the community are often simply there by some kind of luck.

Whether we take the pure structure theory or the excess reduction theory of hierarchies, the real challenge these two theories present to Pierre-Michel’s account is that they argue that mere structure means there will be people at the top. We cannot infer from the existence of "being at the top" that those people have any special gift. As a final example, one has only to think about the problem of identifying the best people at judging the stock market to realize that this is a real difficulty. There may be no foundation for the concept of genius or creativity at all. I should note, too, that there is no non-arbitrary statistical approach that can
definitively resolve this problem, because of the algebraic dependencies involved. It’s just a puzzle.

So that is a second family of alternatives to Pierre-Michel's argument. Those who are at the top are simply there because there's a top, and somebody has to be there. Note that this argument is FAR more general than Pierre-Michel's, applying not only to symbolic work but to any realm of human endeavor where there are rankings and hierarchies. Note also that the amount of room at the top is a function of modes of distribution. Sherwin Rosen's famous article on the economics of superstars shows well that the rise of things like long-playing records vastly reduced the size of the elite of musical performers. In reality, there are dozens or hundreds of women in the world who are as great opera singers as is or was Renee Fleming. But there is not room for all those people at the top of a system that can achieve universal distribution.

A third family of alternatives to Pierre-Michel's argument grows out of Dan Chambliss's brilliant article on the mundanity of excellence. If you have not read this article, do so at once – it is in Sociological Theory in 1989 and is one of the real classics. (Whether or not it is a work of genius is what we are arguing about!) Dan coached world class swimmers, and what he showed was that - in the terms of my opening passage - such swimmers are craft workers. There is no such thing as talent. World-class swimmers are simply obsessive pursuers of their craft, who practice a little harder and a little longer, whose bodies happen to fit the task a little better, who focus their energies with particular insistence on the one task of winning swimming races. They are not unusual or special people. They are not the physical equivalents of geniuses. They are hardworking craftspeople who have the right bodies to do exactly what they are obsessionally dedicated to doing.

This challenges Pierre-Michel's argument more on its own home turf. For such craft production in the arts has heroic successes to its name. The classical
music world of the 17th, 18th, and even the craft portion of the 19th centuries is evidence for the power of Chambliss’s argument. The amount and quality of the music composed in those craft centuries is huge, and we listen to only a tiny fraction of it. But the average level of composition and performance was extraordinarily high, without there having been any notion of genius or talent. Mozart was indeed a transcendent craftsman, so good at what he did that we tend to judge the quality of music from his era by the degree to which it resembles his music. But he wrote a LOT of music. John Sebastian Bach churned out cantatas like a machine, an amount of music that is simply unimaginable to the modern "genius" composer, and nearly all of it is of a complexity that no modern composer would dare attempt. The same is true for many painters with their ateliers and students. In literature, it is true, the craft period was not so obviously productive, although poetry could be argued to have had a strong showing in the craft period. But it is true that high quality pot-boiler fiction is a later creation, once the mass reading audience is in place, in the 19th century. Interestingly, though, while many great fiction writers of the nineteenth century chose to publish very little, craft-like production on a giant scale was the medium of Balzac, Dickens, Trollope, and dozens of others, achieving true assembly line organization in the writing of Dumas-pere. Literature in the 19th century seems to show a real choice between the craft writers aiming for quantity and the more self-conscious great artists following the new model - George Eliot and Flaubert.

But the more general point here is that there is no really massive gulf between the Salieris and the Mozarts. On this theory, they are all basically alike, What differentiates them is really only minor talents, slightly more obsessional practice, and perhaps a more close-minded commitment. The narrowness of the room at the top then selects only the few, just as the wall-touch identifies the winner of the swimming race. On this theory, too, there is not really any need to
theorize special conditions of practices of creativity. All symbolic work is more or less the same, and while some of that work ends up being pretty pedestrian, much of it is excellent, but only the very best of it has enough difference to be noticeably superior. Overall, it’s just another normal distribution.

Note that in both the structural and the mundanity approach, the driving force in the appearance of “genius” (where no genius really exists) is actually the audience or the patron, a group about which Pierre-Michel has said surprisingly little. For in both cases, the driving force is the existence of hierarchy, and the hierarchy is, essentially, external. It is true that creative people tend to have their own hierarchies - Dave Grazian's book on blues musicians shows that well and academics itself provides many examples of scholars unknown beyond a narrow range of colleagues but central to the group's creation of new work. But the hierarchies that create the mere appearance (as opposed to the reality) of genius are those generated externally.

So the question then becomes what drives external hierarchy for creative work. In some cases this is obvious - competition among patrons for art works for example. A system of invidious comparison between patrons requires invidious comparison of creators if it is to function effectively. (Although I might mention that from a Veblenian point of view supporting completely unsuccessful creative workers is better than supporting people who amount to something, because it is more wasteful. I would predict that among the oceanically wealthy, supporting hopeless cases may well be the crucial mark of wealth.)

At other times, the creative rankings are driven by sheer capitalism. This is the case in fashion, which requires perpetual novelty in order to generate perpetual sales, and hence evinces an extremely regular "novelty" or "creative" process that is actually a three to five year negative autoregression whereby wide legs succeed skinny jeans which succeeded stovepipes which succeeded body hugging designer
jeans, etc. There is nothing creative in such a process at all - one can predict that heels will cycle from flat to high at a regular pace, that decorations and colors will move from severe simplicity to busy complexity and back again, one can even predict which decade will provide the current versions of retro. This is utterly predictable, not creative at all.

Thus I would argue that one of the crucial next steps in assessing Pierre-Michel's arguments lies in analyzing the dynamics of the CONSUMERS of created things, even though it is part of the great nineteenth century genius-fiction to say that consumption doesn't matter. That's only true when, as in the present, you have a lot of general purpose funding for "creativity," provided by the state, by granting agencies, and so on. Artists under the disciplines of markets behave quite differently - they produce what the market calls for - as did Shakespeare, Handel, Mozart, and all the other craft creators I have mentioned earlier. The death of classical music in the twentieth century can quite obviously be attributed to music that became meaningful only to musicians.

I would like to close with a couple of minor comments. First, I think Pierre-Michel needs to distinguish between different time horizons of creativity. What we usually think of is REAL innovation in the arts is actually innovation that is defined by the fact that it will be narratable at the century long level. No one is going to see such things on the year to year time line that is implicit in Pierre-Michel's empirical discussions about the salaries of young artists. Pierre-Michel is there talking at quite minor levels of creativity, the kinds that work at the quick-process level of getting the individual defined as a new young hot shot. But these have only to do with a very local time period. The hotshot sociologists on the beginning job market each year are almost never people who become major figures later. Anyone who has been around for a while has wondered about that fact. It happens because Hotshots on the academic market are maximized for "creativity"
within the levels that matter at a very low, short-term level. This means excellence at producing mechanical work in some standard tradition. But the people who become major figures at midlife are optimized on a longer time horizon, and were unlikely to look hot at first job time. They had real ideas and complex notions and so they did not fit into the hotshot model. You can see this pretty obviously in the citation figures and in large systems like the US. And it's also true that even the midlife leaders - the highly cited people in any given decade, say - disappear in the longer run. I am now doing a study of major cited figures in American sociology by decade, and it is striking that a large proportion of them are gone in twenty years, after having been massive, dominant figures. They were HUGE in their time, because their "creativity" - or its ability to pay off - was optimized to this decadal rhythm. But the people who come to be defined as creative in the long run are rather those who happen to have been the ones who are in tune with wherever posterity happens to have arrived later on. This could be because those earlier people were great, or, again, it could be because of chance. But we do know that precursors are defined in terms of later rules, not earlier ones. A few major figures will be narratable in later times because they were, in terms of later ideals, so cosmically wrong - Talcott Parsons and Herbert Spencer get that treatment in sociology today. But most of the "classic and canonical figures" will be whoever are the most plausible precursors of the views favored by the later historians. Chas Camic has of course written elegantly about this search for precursors.

In this sense, the whole attempt to empirically isolate origins of creativity may be in vain, because the criteria of importance change with time. AND they differ by time horizon. One has only to undertake the simplest historical work on a familiar period to realize that there were dozens of creative people who played absolutely dominant roles in the creative worlds of the time that are utterly
forgotten within short order. Did their creativity disappear? Was their eminence false? No, the criteria changed and the time horizon changed.

Let me close with a comment about unfinished works, reacting to slide 14. I am not sure I believe Pierre-Michel’s account of optimization in this slide. There are many reasons for failing to complete a work, and one of them, to be sure, is that the creative process is satisfying in itself, as he notes. But Pierre-Michel has omitted a crucial reason for leaving things unfinished. That is the fear that the work will not be as great as one hopes. We see this in many dissertation students, who take forever trying to make a dissertation perfect, when they should simply finish it and try to do better next time. Or, to take myself as an example, I have promised a major systematic work on time and ontology for twenty years now, but still have not finished it. It is clear that part of the reason I have failed to finish this book despite three substantial tries is my fear that it will not be as great as I hope. Perhaps an unfinished masterpiece is better in my mind than a finished mediocrity in print.

And so I am struck that in the very next slide Pierre-Michel sees lack of success as exogenous but unfinishedness as endogenous. But under the modern definitions of art in terms of genius - the definitions Pierre-Michel accepts - what artist cares about external success? External success doesn't matter. After all, Paul Dukas burned almost his entire oeuvre just before death because he found it not good enough. But before the genius era, things were quite different. And so perhaps we should get back to craft ASAP. George Frederick Handel was walking through the Vauxhall Gardens one day. His companion remarked that the music they were hearing was utter trash. "Yes," said Handel, "I thought so myself when I wrote it." Handel may have taken only three weeks to write the 52 pieces that make up the most performed single piece of choral music in the entire western repertoire, but he did not think of himself as a genius - just a great craftsman. And for those
who cannot forego the lure of genius, there is always the wise remark of Richard Strauss, deep in the epoch when artists were regarded as geniuses. We should all take this remark very much to heart: "I am not a first-rate composer," Strauss said, "but I am a first-class second-rate composer."