

Hypergraphia and Hypographia: Two 'Diseases' of the Written Word

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7:30 p.m.

The Philoctetes Center

Levy: Francis Levy
Nersessian: Edward Nersessian
Oppenheim: Lois Oppenheim
Flaherty: Alice Flaherty
Reyes: Pedro Reyes
Lethem: Jonathan Lethem
Jacobs: Alan Jacobs
Sarkin: Jon Sarkin
Audience: Member from the audience

Nersessian: Tonight's roundtable is entitled *Hypergraphia and Hypographia: Two 'Diseases' of the Written Word*. I will introduce Lois Oppenheim, who will be moderating tonight. She is Distinguished Scholar, Professor of French, and Chair of the Department of Modern Languages and Literature at Montclair State University. Her most recent books are *A Curious Intimacy: Art and Neuro-Psychoanalysis* and *The Painted World: Samuel Beckett's Dialogue with Art*.

Oppenheim: Welcome. Thank you for coming this evening. Let me begin by first introducing the panelists. Alan Jacobs was Assistant Professor of Neurology and Neuroscience at the Weill Medical College of Cornell, Assistant Director of the Cornell Memory Disorders Program, and Director of the Neuroendocrine Unit at Cornell before becoming Assistant Professor of Neurology at SUNY/Downstate, and a member of the Alzheimer's Disease and Memory Disorder Center at the University Hospital of Brooklyn. In 2003, he left there to go into private practice in Manhattan, focusing on memory disorders, behavioral neurology and neuroendocrinology. Dr. Jacobs' clinical and research interests have centered on dementia and neurodegenerative diseases, and he also has had extensive experience diagnosing and treating neurobehavioral disorders, and in psycho-neuroendocrinology.

Francis Levy, who is directly opposite me and who most of you I'm sure know as the Co-Director of the Philoctetes center, has written numerous critical essays, short stories, humor pieces, poems, et cetera. They have appeared in a wide range of publications including *The New York Times*, *The Washington Post*, *The New Republic*, *The Village Voice*, *The Quarterly*, *Hampton Shorts*, and *The East Hampton Star*. Most exciting, he has a novel coming out next summer, 2008, called *Erotomania: A Romance*.

Pedro Reyes, who is sitting next to Francis Levy, lives and works in Mexico City. He holds a degree in architecture from the Universidad Iberoamericana. His work addresses the interplay of physical and social space, and has been shown at institutions throughout the world, including the Carpenter Center for Visual Arts at Harvard University; the Aspen Art Museum in Colorado; the Reina Sofia Museum in Madrid; the South London Gallery in the UK; the Yvon Lambert Gallery and P.S. 1 in New York; and both the Shanghai and Venice Biennales.

Jonathan Lethem is sitting directly to my right, and he is the author of seven novels, including *Motherless Brooklyn*, *The Fortress of Solitude*, and *You Don't Love Me Yet*. He has also published three collections of short stories, a novella, and a book of essays. He is the recipient of a National Book Critic's Circle Award and a MacArthur Fellowship—that's the genius award.

Alice Flaherty, who is sitting between Alan and Jonathan, is an Assistant Professor at Harvard Medical School and a neurologist on staff at Massachusetts General Hospital and its affiliate, McLean. Among others, she treats patients with permanently implanted deep brain stimulators for mood or movement control. She's also an extraordinarily prolific writer. Her book *The Midnight Disease: The Drive to Write, Writer's Block, and the Creative Brain* has been the subject of numerous television and radio features and is required reading at many universities in the U.S. and Europe.

Flaherty: Not many.

Oppenheim: What? Not many? Some. Okay. Her other writing spans a number of genres, including an award-winning textbook, numerous scientific articles, a children's book about a picky eater and the Loch Ness monster—that's the one I want to read—and the text for an organ work on Jacob and the Angel. She is currently completing a book on the biological links between psychosomatic, stoic, and empathic behavior.

So it's quite an impressive lineup of panelists. I just want to say a word, to begin, about why we're doing this panel and why we're doing this panel now. Actually, the initial inspiration was Alice's book *The Midnight Disease*. The Philoctetes Center has been in operation now for four or five years, and it's been devoted to exploring and investigating the ways in which the imagination works. But it occurred to us that we have not yet addressed the question of why the imagination sometimes works at a more rapid pace than one might expect it to, or why it sometimes comes to a complete halt. Those are the two questions that we're going to be addressing tonight.

Actually, as Alice says in her book, there are two complimentary levels of the origins of creativity—the psychological and the neurological. On the psychological level, hypergraphia draws attention to the overwhelming but often neglected importance of drive to creativity. On a neurological level, it points to where creativity comes from, physically, in the brain. So I think we'll address both of those things to begin with. I'd like to start by asking Alice to see if she can define, as closely as possible, what we mean by the term “hypergraphia,” and maybe discuss a little bit about the origins in the brain. Maybe Alan will jump in with that and we can begin our discussion with some understanding of what the term “hypergraphia” means, where it comes from, which should allow us some insight into what its opposite, writer's block, is.

Flaherty: So strictly, when doctors want to study something, they have to first give it a Latin or a Greek name. The way doctors use the word “hypergraphia” is as an overwhelming drive to write. There's going to be a lot of debate, I think, tonight about when that's pathological and when that's wonderful. But from a doctor's point of view, they don't care about that. They just want to know if there's something in the brain they can point to that does that. The classic thing that was

described was people who are hypergraphic because of temporal lobe epilepsy. In between seizures, some people would just have a personality where they wanted to write all the time. It became clear, when people started thinking about it more, that in fact it was similar to what goes on in people who are manic or hypomanic. Then people started to wonder whether it was similar to what “normal” writers do, if there is such a thing. That led to the next question: “Is hypergraphia the opposite of what we all are much more familiar with, which is writer’s block?” There are probably lots of ways in which it’s not similar. There are many different ways of being blocked. There are different ways of being hypergraphic as well. I don’t know if you want me to talk about the brain much.

Oppenheim: I’d actually like to ask you one quick thing here: why do some people with temporal lobe epilepsy become hypergraphic and not others? What is it about the temporal lobe that does that in some patients and not in others?

Flaherty: No one knows. I was going to say ten percent. You can just say twelve and a half percent. Some people argue that the hemisphere in which the lesion that causes the epilepsy can make a difference. It probably depends where—anterior or posterior—and it also probably depends on the person’s temperament and upbringing. For instance, if you’re illiterate, you cannot become hypergraphic. If you’re someone who paints wonderfully and you feel comfortable expressing your emotions, you may be a painter instead. There may be other forms of hypergraphia that use other kinds of symbolic or less symbolic communication.

Jacobs: I would just add, at least going back to the original descriptions around the time of Geschwind, the whole concept was that in temporal epilepsy, there is sort of excessive electrical activity going on in certain parts of the temporal lobe that make the individual map extreme emotional valence to lots of different things—their thoughts and whatnot. It would take the form, in writing, of diaries. It was not just literature, per se, but writing a diary—thinking every thought you have is so important that it needs to be written down, often with extreme detail. So you could, in reading it, probably tell the difference between that and literature, as it were.

Levy: Alan, some people don’t know who Geschwind is, maybe.

Jacobs: Oh, Norman Geschwind is sort of the father of modern behavioral neurology. He came on the scene in the ‘60s. He died, I guess, in the mid ‘80s, and is revered by those of us in behavioral neurology. He brought on the concept of disconnection syndromes, or revived it after probably fifty years of lying dormant, and transformed the way we think of brain networks.

Oppenheim: Do the two of you see, in your clinical practice, many people with hypergraphia?

Flaherty: I do now.

Jacobs: I don’t.

Flaherty: They come to me. But I think it’s very rare that most of us, as neurologists, ask people about what they do as hobbies or in their spare time. Once I started asking, I did turn up a lot more, especially people who became hypergraphic after a bereavement or a personal loss. Then

you want to say, “Is this the same kind of hypergraphia?” You can make up biological reasons why it might be, actually. But now people just kind of automatically send me their bereavement memoirs and their stories of what it was like to have this illness and lose that part of themselves. It may be loss of their own self. But in my practice there are a whole lot of people, especially email hypergraphics—that’s a subset—a lot of those, too. The classic thing—the classic TLE hypergraphic—is less common.

Oppenheim: Temporal lobe epilepsy.

Flaherty: Yes, I’m sorry. I’m not an epileptologist, so I don’t see those patients.

Oppenheim: Alan is.

Jacobs: No, no.

Flaherty: But friends down the hall.

Jacobs: No, I’m a behavioral neurologist, although my field is usurped by memory disorders these days.

Oppenheim: Pedro, I see you writing away frantically over there. Can you tell us why, or what you’re writing?

Reyes: I was hearing about epilepsy and how the kind of firing between neurons happens. I don’t have a hypothesis or hyperthesis yet, but I was thinking of other names that were given to these kind of spontaneous outcomes, because there are several signs that I remember. For instance, this is a kind of sign that is used in pre-Columbian codex, which is meant to represent speaking. For instance, Pentecostals or these kind of events where people speak in tongues were also represented with a kind of flame on top of their heads. Someone would be represented in codices or paintings with a kind of firing in their minds, perhaps next to epilepsy or it could be like a chart where you have hypographia and then kind of a spontaneity axis where increasing spontaneity could lead to hypergraphia. Those were the notes I was taking while I’m hearing my friends here.

Oppenheim: Okay, thank you. Francis, do you have any personal experience with hyper- or hypographia, being a writer?

Levy: Well, it was very interesting to me in reading Alice’s book, that she said that many times hypographia and hypergraphia—Karen and I were discussing the words today—are looked at as opposites. But in fact at one point you said it was your hypographia that made you hypergraphic—the fear of the block is what made you want to write. It was a passage in the book. Am I correct in saying that?

Flaherty: If I said that, I don’t remember it. That wasn’t my experience, but there are lot of people who are both, either in alternation or even in different genres at the same time. Coleridge, for example, when he was blocked about poetry, could churn out metaphysics and newspaper

articles. My own experience was not really a response to a fear of being blocked, but I know a lot of people who get blocked by the fear of being blocked, which is kind of the opposite.

Oppenheim: What do we mean by writer's block? Before we actually even get to that, why do we talk about writer's block and not composer's block and painter's block?

Flaherty: Because you're writers. Composers talk about it.

Oppenheim: Do they?

Flaherty: Oh, yes.

Oppenheim: That's a term that is not generally referred to as often.

Flaherty: A lot of people say "creative block."

Oppenheim: Alan?

Jacobs: I wonder if a major league baseball player in a batter's slump could be—

Levy: I think, Lois, people look for occasions to create an arena in which their specialty is made more possible. For instance, chess players—one of the interesting things I found out is that chess players work out. Part of the training for being a chess player may be swimming—some of them are fantastic swimmers. Some of them do sprinting. What a creative person, I think, from my reading and from my own experience, is concerned with is creating the occasion—the arena and the existential conditions—under which he can produce the work that he does. For instance, when I got up this morning—I do everything the same every single day of the week. I do not write first. I always get up. I have a bench in my living room. The first thing I do is I stand on my head. The second thing is I do some pushups. Then I do sit-ups. Then I go downstairs and do six sets of repetitions—always the same—of weights, do pull-ups, and then I do a rather painful martial arts exercise in which I do pushups on what's known as a Bo stick. This is all part of a kind of ritualistic activity. I actually think that the creation, that writing, for me as a writer, is a kind of ritualistic and almost shamanistic activity. It's a body activity—that's another thing. I often say that I write with my hands. I definitely try not to write with my mind.

Now, in terms of psychoanalysis—I've done two basic practices in my life. One is that I've been in martial arts for sixteen years. Again, these things create not the occasion, but they're the catalysts for me to write and to do other things. They create energy and they create a way of disposing with countervailing factors that might inhibit me. What I'm always trying to do is to disinhibit myself to a certain extent. Psychoanalysis is the other major discipline in my life, and has had an enormous impact on me. Let's take it in a very basic and primitive manner: I go to psychoanalysis—I'm in my twenty-seventh year of psychoanalysis. I go four days a week. I go at the same times each day. My mind is preparing itself every time of the day. This is where I learned about writing. I made my writing schedule like my psychoanalysis schedule, except there's one basic and critical difference: in psychoanalysis I'm trying to parse out and find things, to know things. In my writing career I'm trying to un-know things. I actually want to

create a situation in which I go into what analysts and neuroscientists call “primary process thinking.” I want to get myself into a kind of a dangerous world. I think, parenthetically, that the reason why psychoanalysis takes place four days a week in this non-directive way is because the insights that come out in the transference in psychoanalysis are extremely frightening and dangerous. But what I’m doing as a writer is I’m going into this world. I’m capable of traveling the river Lethe and not forgetting—or the Styx. I’m going back into something that, in the case of a psychotic patient, might be very, very dangerous to them. But what I am capable of doing is going between the rational and the irrational. That’s the basic crux of the activity. In my analytic work I’m trying to parse out the meanings; in my writing work I’m trying to take away the attempt to—

Oppenheim: Okay, I see people in the audience. Could you hold your questions, please? We’ll open it up to the audience after we’ve had some more discussion. I started down one avenue and we got a bit sidetracked. I wanted to ask you whether writer’s block—and maybe Jonathan would like to address this—is a lack of words, an inability to find words, or a persistent finding of the wrong word and the wrong idea?

Lethem: One thing that I’ve always been interested in—and it may in fact be, by now, a kind of commonplace of writing instruction—is that writer’s block is a recent development in the history of literary writing. Writers in the 19th and 18th centuries didn’t have this definition and didn’t expect to encounter it, and therefore did not. This is something that interests me because I’ve tended, when I had the opportunity, to talk to apprentice writers who are very apprehensive about this possibility of being blocked, to kind of throw it to them that they can sort of abandon that definition and think of it in terms of waiting or being uncertain. This is where I relate very strongly to the last part of Francis’s description: it seems to me that the fundamental situation that I’m putting myself in when I write novels is a situation of not knowing—tolerating uncertainties. And if you don’t have an appetite for that—I think it’s a temperamental inclination—if you idealize the role of writer, and even if you have some stories to tell, and even if you have a syntactical capacity, you’re probably not going to be someone who will go into a studio or a room, sit at a computer or a typewriter and produce a lot of literary writing—fiction or poetry or memoir—over the course of your lifetime. If you don’t have that appetite, or at least a high tolerance for the state of not knowing—always arriving at extremely local certainties, and then immediately passing from them to uncertainty again. In other words, you’ve got to actually want to be stupid.

Oppenheim: I’m thinking now of *Motherless Brooklyn*, which is probably your best-known novel. First of all, I’m very interested in knowing why you chose Tourette’s, if you don’t mind my asking that, and how much of what plays out in that novel you knew about in advance. You’ve basically answered that, but I want to know within the context of that particular novel.

Lethem: Well, I wound up with Tourette’s because—

Oppenheim: It’s about a character who has Tourette’s.

Lethem: Yeah, my main character is a person with extremely florid and various Tourette’s syndromes—or symptoms, I should say. He’s not in the center of the description; he’s sort of at

the extreme. Although just as you have attracted blocked writers or manic writers, I've attracted people with Tourette's, and so I've met several people very much like my character. I got interested in it because I read about Tourette's syndrome in a couple of essays by Oliver Sacks. And then I was lucky enough to see a film called *Twitch and Shout*, which is just a very direct and sympathetic documentary portrait of six or seven people with Tourette's. By the time I'd read these—it was probably a total of fifty pages in Sacks—and seen this ninety-minute film, I identified so strongly with Tourette's syndrome that it was as though the subject had summoned me to it. I began to see a lot of my own cognitive style or cognitive leanings as being a kind of closet version of Tourette's.

Oppenheim: Without having any of the symptomology?

Lethem: Or having the symptomology manifest in ways that I've made attractive or disguised in various ways. I mean, my writing seemed to me very Tourettic. I took a great pleasure already—I always had—in puns and inversions. And I also always identified the work I did on my sentences as a kind of grooming or combing that seemed to me very, very compulsive. I never disliked revision; I always thought revision had a kind of sensuous quality because I liked reworking sentences. Well, once I had the Tourette's description available to me, it seemed to me I was manically ordering the product of my own writing in a way that was very much like the Tourettic kind of rearrangements and compulsive grooming or correcting or tweaking activities. It just seemed to me that it was Tourettic. So I just looked for a way to translate this excitement into this character.

Oppenheim: Does that make sense to you neurologically speaking as well as, perhaps, psychologically speaking?

Flaherty: I don't want to be, like, narrow about this—some of the things you're talking about, maybe we would say is more like obsessive-compulsive disorder. But there is this huge spectrum, and some of the things you're describing are things that are common to many people or disorders. But everything you're saying is true. But the other thing about feeling like you have some Touretteness—I think most of us would say—is that we can easily pick out several people with Tourette's who probably don't know they have Tourette's in this audience, because all of us make the ballistic movements of Tourette's. It's a spectrum. Some people just do it so much that it's called a syndrome. It's not really a disorder unless you're annoying your family.

Lethem: This is what I felt—that everyone could be placed on the spectrum. Part of my excitement was understanding that I was exaggerating my identification with it in my pleasure at discovering it, and wanting, in a sense, to impose that experience on my reader by making a description of it that was so attractive, in a sense, that for the duration of the reading, anyone who read the book would think, “Oh, gee, this must also be me.” So I was in search of this universal confusion in a way. I wanted to embrace this mistake that, “Oh, I've got Tourette's just as much as someone who is suffering from it does,” which isn't literally true, but I felt the truth in it, and I wanted to make the book recapitulate that—the embracing error, in a way.

Oppenheim: Pedro, as a visual artist, how do you relate to all that's being said here about the writing process? Do you have any particular constraints that you place on yourself as an architect and a visual artist?

Reyes: I think there is not so much division between drawing and writing. The root, "graphos," applies to both. I think that perhaps it's even more common for people perhaps to do scribbles on a paper—how do you call it?

Levy: A doodle.

Reyes: You know, like lines.

Oppenheim: Doodles.

Reyes: Yes. There is hyperlalia or hypolalia, this kind of being speechless. I was wondering if there is a significant division between writing with meaning and writing as more like just a doodle. I remember a friend curated a show here in New York where she made a very peculiar decision to include the notebooks of the brother of Robert Crumb, the cartoon maker. In this movie, he does cartoons but ends up filling piles of notebooks which finally don't contain words anymore. It just becomes a physical activity. So I think that there may be graduations of both the spoken word and writing or drawing, where you are possessed by sound or by line to a certain degree, and it can lead you to meaning or it can lead you just to the physical activity.

Oppenheim: Alan, you wanted to say something?

Jacobs: Well, two things came to mind. One, there's another form of, loosely, hypergraphia, which is described in people with right hemisphere strokes, where, in certain parts of the right hemisphere in the parietal lobe, you can't form shapes and you have trouble with constructions. The letters are misformed, but yet there is a compulsion or this rapid writing, and it's nonsensical or has that flavor. It's been talked about as a release of the left hemisphere. You don't lose writing, but you just can't do it well. I just lost my train of thought on the other.

Oppenheim: It will come back to you.

Jacobs: Oh, I got it. So there's this general sense in which the left hemisphere is symbolic in its activities and the right hemisphere is more immediate in terms of its affiliations. So it could be that the same process could just filter, depending on which side of the brain—I mean, the lesion—

Oppenheim: We keep talking about the structure of the brain; we haven't talked about any of the chemical aspects of the brain. We haven't talked about the limbic system and mood disorders, et cetera, and how that plays into hyper or hypographia. Maybe Alice would like to say something about it. She describes very poignantly her experience with affective experience that led to her hypergraphia.

Flaherty: Just to back up a little before I do my poignant experience spiel. Even for the people who were first described as hypergraphic, in fact it correlated especially with emotional volatility, so the people that wrote the most were also the most up and down in their emotions. Not to be too cynical about my personal experience spiel, but one of the things about writing, one of the reasons we do write is because it allows us to kind of kill certain painful experiences by saying them over and over again until they start to sound like noise. That has happened a little bit with this for me. I had twin boys who died at birth about nine years ago. I was very upset. I had just finished my medical residency at the time—my neurology residency. Then about ten days after that, bam, something happened. I went from being very sad to being what felt kind of like manic to me. I was still very sad, but I was incredibly overcome by the urge to write everything down because it was so important. It really was just like day and night, or like the moon and sun had changed places. After that I've really never been the same, although I'm certainly able to pretend to be the same more than I was at that point. So I wrote for about four months. It was because of this emotional drive. It was partly the drive of the grief; that was very involved in it. But it partly felt like it was just something that landed on me, because I had to write about everything, and everything was important to me. All my friends were saying, "Poor thing, you're so depressed," and I was like, "Well, I'm sad, but this is really something else." Then about four months afterward I just stopped writing and stopped doing quite a lot of other things. I actually wasn't terrifically unhappy, but I was just kind of stopped. And everyone's like, "Okay, now we get it. This is depressed, and before, you must have been manic, as you were suggesting." I think actually that probably was more accurate: it wasn't a particularly—it was just sort of a dead depression. Anyway, that's kind of been happening ever since, but much more toned down.

And because I was a doctor, especially a neurologist, I wasn't interested in emotion. I was interested in drugs. So I thought, "Let's see if we can control this." Luckily I had a psychiatrist who was very willing to experiment with me, and after a couple of rather bad mis-starts, we finally got the writing to a point where I could do it without it becoming overwhelming and painful, and I can appear presentable in public and so forth. Forgive me for the cynicism by which I move back and forth between these two domains, but I used to think that by being a doctor I would get over this mind/body thing and it wouldn't be a problem anymore. In fact it just became sort of more of a problem: the fact that I can have an emotion, but I can also take a pill that will exacerbate it or flatten it, and that is both really scary and, actually, really wonderful if you're in the state of needing that. That is, as my boss said, when I started going over to the dark side and becoming interested in psychiatric and psychological explanations of what was going on, as well as the neurological explanations that I'd been sort of brought up to take.

Oppenheim: How do you feel, those of you who write? Is your mood affected by your writing? What kind of mood-affective results do you feel after you've written, or aren't there any?

Lethem: Well, I thrive on having written, and I like to write every day. I have a general discomfort if I'm not writing often enough, or if I feel like I'm sort of stinting it. But I'm very conscious of how this is an extremely long-term, developed thing. This isn't some emotional structure that was native in me the way my appetites or moods were native in me when I was growing up. It's something that I decided to create, and it has now become kind of irreversible—it has a resemblance to a kind of natural or inborn emotional structure, but it's trained. I actually

used to resist it. When I was beginning, I identified with writing much more strongly than I was acclimated to doing it. So I would try to write for long sessions and would only succeed in writing briefly, and I'd feel this real confusion. Because through my reading and my aspirations and the biographies of writers that I'd read and absorbed, I wanted to be someone other than who I yet was.

Well, I've become that person. Now I'm really acclimated to writing a lot—to spending a lot of time in that state. But I'm going to insist on it as a kind of construction, not that I can go back anymore. When I'm a tyrant, an ogre at home, and my wife says, "You're not writing enough, why don't you just take care of this?" it would seem as natural, as inborn as some other kind of state. But I made myself into that person.

Oppenheim: Do you know whom you write for? Do you have an audience? Do you have a reader that you write for, or are you writing for yourself?

Lethem: The reader always changes, but it's pointed outwards. I've never kept a journal or a diary successfully. It always seemed in bad faith to me to even try, because I was pretending to write for posterity and it seemed really pretentious because I had to imagine a reader or there was no point in enunciating even the first word. So the reader changes, and I actually get very excited about realizing that I've pointed a new work, a new essay or story, at someone who I haven't addressed before. But there's always someone or some combination of people.

Oppenheim: I'd like to ask the same question of Francis, but I also would like to encourage you all to jump in and ask each other questions as we're talking.

Levy: I would agree. I'd like to go back to what you said a little bit earlier: that it's a long process or path. I think it was very interesting when Alice brought in the question of her own traumatic experience. I look at the writing process as creating kind of a rational venue from which to approach irrational things. These things, from my point of view, inevitably have to do with the two worlds that you talk about. There's the one—the whole constitution of the personality as it manifests itself kind of in a neuroscientific way, but then, naturally, kind of intrapsychic trauma and the history of the inner life.

One of the most interesting things that has happened, as far as the inception of the Philoctetes Center is concerned, is its name. When we started the Center out, we invited varying people to come, who were mostly, at that time, artists and writers. I think the first time we had Joan Acocella, Sharon Olds, and another artist who's name I can't bring up right now—a painter or someone. And there was a natural kind of uprising against the name: "Why Philoctetes? Why the wounded character?" No one wanted to talk about this, and everyone tried to convince me not to name the Philoctetes Center the Philoctetes Center, but I remained steadfast in my love of the Sophocles play.

But the basic crux is—and you see this repeated again—this is why you seem like an anomaly to me even though you're not a fiction writer. For instance, you take the case of Eliot, who writes "Tradition and the Individual Talent," which is about the impersonality of the artist. And meanwhile, while the great poems like "The Four Quartets" are being written, it's indubitably

something to do with his wife's mental illness, which was a source of enormous pain. I mean, Ed and I don't agree on this all the time, about this correlation between life experiences and the creation of art works. The other one that I think is the most dramatic example of this in literature is Proust's famous essay "Contre Sainte-Beuve," in which he argues against the autobiographical interpretation of artwork. What greater autobiographical artist is there than Proust? So, why do artists resist the attempt to peer into their inner historical and kind of traumatic lives to discuss their work? The easy explanation of that is that they don't—this whole notion of pathographization; they don't want to be pathographed. That's what would come out of those early Philoctetes meetings.

But I have another feeling about this, and that is that the reason is that artists basically copyright their work. Writers, especially, copyright their work, but they also copyright their inner lives. Artists copyright their imaginations. This process that goes on in the transformation of painful experience into artwork is very much the way the North Koreans feel about their nuclear reactor: you don't want to locate it, talk about it. It's where the thing is really happening. I'm not a mystic of any sort, but there is something going on. I don't know too many people, to be honest—and this is going to get me into a lot of trouble—who practice art, who don't have a higher than normal incidence of extreme trauma in childhood, or a higher than normal reactivity to normal experience in childhood, whichever way, that their intrapsychic being is somehow so constituted that the normal events that people would react to received a highly exaggerated reaction. So I think that the basic crux is that a key to this explosive feeling is in this dark process.

I will lastly say that I think that a metaphor for the experience of producing writing is not Joyce's *Portrait of the Artist*, but Conrad's *Heart of Darkness*. I think *Heart of Darkness*—Marlowe's attempt to go back into the primitive world is, in a way, a metaphor for the writer's need and search to find something that is both missing, and to complete the activity—like you mentioned about the Kleinians in your book—to complete the activity by creating this thing that is a replacement, in a certain sense, an object of beauty, wholeness and understandability amidst this kind of chaos and fragmentation that they may have experienced.

Flaherty: Everything that you're saying makes sense to me in the context of our kind of modern, New York definition of what counts as art. But I think that if we try to extend that too far into other genres where the lyrical or the personal plays less of a role, then *Heart of Darkness* really doesn't explain certain sonnets and very formalist works of art, which are still quite beautiful.

Levy: Well, that's what Eliot was saying in "Tradition and the Individual Talent." But in a certain sense, couldn't you say—let's look at the 17th and 18th century writers, where convention was the essence of the work, and not the lyric. I pose that as a question.

Flaherty: One other thing that you made me think was that one of the reasons artists try to say that they're not writing from their own experience is for the same reasons that scientists would like to pretend that they aren't—if you're trying to make a global statement about truth or beauty, you don't want it to be influenced by the fact that you were beaten as a child. You want it to seem that you're tapping into something. And scientists, of course, make the mistake of using

passive voice constructions to imply there's not even any people involved in what they're saying. I have a few other theories, but I'll save them.

Oppenheim: Alan, what happens when a patient comes to you and says, "I'm hypergraphic," and you discover some kind of temporal lobe problem and you start to treat them with medication? What happens to the creative drive and to the need to write? Is it diminished to the point of being problematic for the writer?

Jacobs: Again, in the sense of temporal lobe epilepsy, which is where I would see it as opposed to a psychiatric illness, per se, hypergraphia is a sine qua non of this interictal personality trait. The excessive activity—not the seizures themselves, but the in-between times—makes their temporal lobes overactive and makes them sticky and hypermoral, or whatever it might be. You can make the seizures go away with medication, but it's not as easy to make the personality change because something has happened to the temporal lobe that's bringing seizures and personality, and you're not getting at that base thing—it's an injury, for instance. You're just stopping the seizure. You don't make big changes.

Flaherty: One thing is, no one comes to your office and complains of it.

Jacobs: Right, you have to ask them.

Flaherty: They don't want it to go away, most people. The second thing is, I think you're probably deliberately oversimplifying. At least in my understanding, what goes on in the temporal lobe between seizures is that there is decreased activity, and that's why people who write a lot are in some ways similar to people with Wernicke's aphasia. Is there an equivalent in speech? There are speech conditions where people just have this outpouring of speech. And that, in general, seems to be associated with certain types of decreased activity.

Now, it's very complicated and it's probably a mix up. But that's why, if you start treating people for their seizures, sometimes you can even make they're hypergraphia worse because if you're decreasing temporal lobe activity, you get the forced normalization. We should just sort of back away from this, but the question of balancing out somebody's desire—like, take a manic patient who wants to talk all the time, who has the equivalent in speech, which would be pressured speech—so let's say you give them a lot of dopamine blockers to make them stop talking. Can you titrate it back up so they talk normally? Well, it's hard but you can sort of do it. They don't like it.

Reyes: I'm thinking in general terms how the title of this evening has these quotations marks for the word "disease." Both of these extremes are necessarily undesirable. But I think that, for instance, imagination is something that is not taught. Everybody has to somehow develop his own method for imagining things.

I once found a very simple, short text called "An Accelerated Course for Imagination." It was basically these four signs, which were symbols for plus, minus, multiplication and division. It's very curious because through these four symbols, a lot of mythological figures were explained, as well as fables, et cetera. For instance, if you were to amplify something, you could amplify it

by using a single, giant letter like an “A”—the word is suddenly amplified where all your attention goes into a single letter, focused enormously on one thing. Or amplifying in quantity, like an enormous book—do you know the story about the largest book in the world? Do you want to hear it? It’s very short. It happens to be in Burma, which was in the news recently. In the 18th century, the Burmese king decided that he would collect all Buddhist texts. He called monks across Asia to a big summit where they would bring every possible text that was available on Buddhism. They were using bamboo tablets, and he decided that that was not durable enough. So every page should be a marble slab. So they got into a kind of social hypergraphia of putting all these words into marble. But then you come up with the problem of how do you bind a book where every page is a humongous marble slab? So they decided to do a city where, like, the city would be the book. So chapters are streets, and sections are avenues. There is this kind of citadel that is known as the largest book in the world. And then you reach the center and you find a model, which is a reproduction of this same city in miniature, and that’s the index. That is an example of amplification, no?

Permutation would be multiplying something, which can lead to language machines like Olympian sonnets where you can rearrange lines in as many forms as possible. So perhaps there can be hypergraphic texts that have a life of their own because they multiply. All these kinds of experiments of the 50s and 60s, like Borges was dreaming up, now exist with the Internet and the hypertext revolution that came into existence twenty, thirty years ago. For instance, division: I was thinking of Huidobro, where he goes into these kinds of litanies where he, for instance, splits a word like *golondrina*—I don’t know how you call this word.

A: It’s a swallow.

Reyes: It has a tail like a scissor. A *golondrina*. So he takes a word and he kind of cuts half the word and then finds many, many, many endings for that word. So I’m thinking that you can become more elaborate about hypergraphia in terms of introducing certain machines or certain kinds of mechanisms that potentialize the production of language. I mean, that is not like “hyper” as a kind of general thing, but you can hypergraphize with a kind of a tooling of language. You can almost become musical about it.

Oppenheim: What about hyperlexia—the compulsive need to read? Does it fit into the same—?

Flaherty: I don’t know if they’re any more related than the need to listen is related to the need to speak. They tend to be opposite. In fact, hyperlexia, at least from a neurologist’s point of view, we often see it in kids who are autistic. And they often don’t have very good comprehension of the text. They will recite the words. I think, of course, many of us would consider ourselves hyperlexic. Have you ever had the experience of eating breakfast and the box of breakfast cereal is there and you can’t keep from reading what’s on that? That’s a little different.

Levy: Pedro brought up a really interesting point. It’s a question, kind of: what’s the point at which the hyperlexic tendency—

Flaherty: Hypergraphic?

Levy: Yes. Then there's the other one—grapho—

Flaherty: Graphomania—Kundera's term.

Levy: Yes. Here on this page of Alice's book here—is this the correct pronunciation, Kraepelin?

Flaherty: Kraepelin, yes.

Levy: The one who identified the disorder of hypergraphia. You see the writing all over the pages. It reminds me of doodlers, too. We had a doctor here in our last exhibit who had done these incredible, elaborate doodles. But the question I'm really asking is, what is the point at which the hypergraphic tendency turns into an artistic creation?

Oppenheim: Well, when I watched Alice being interviewed on Dateline—you described how you had bought some magic markers, I think, for your children. And they never got to your children because you got in the shower and started drawing all over the wall of the shower.

Flaherty: That's a very interesting conflation of a couple of stories. I think the clearest way in which you can tell art from hypergraphia is that art sells. Other people want to hear it. Other people get something out of it. So often when I'm writing, I'm in this situation where if my writing is bought by other people then I'm not crazy. But if I'm just writing all the time and nobody else cares about it, then it's just mania. So I have to write well, for lots of reasons. I was trying to figure out which anecdote you were referring to, but I think we'll just forget that whole period.

Lethem: You're making me think about a writer who has been a longtime model for me, and I've recently had the privilege of editing some of his novels for the Library of America—Philip K. Dick. He is a very interesting person to consider in this light because he is, I think, an extremely good candidate for a retroactive diagnosis of temporal lobe epilepsy. And he did die of a stroke, in fact. Approximately ten years before he died of a stroke, he had an episode that he was very overt about. It wasn't something he was embarrassed about or that he hid in his life. He had a visionary episode—a period of streaming images, bright lights—apparently quite in line with certain temporal lobe epileptic seizures. And then he immediately developed an interpretive fervor and spent an enormous amount of time writing material that was an attempt to explain or encompass this visionary episode that had begun and ended—it was bounded in the space of about a week of his life—in which he saw these frantic visual hallucinations and they seemed enormously portentous to him.

Now, what's so interesting about looking at Dick in this light is that he was already, by a lot of standards, a graphomaniac. In the 60s he wrote seven novels in a year at one point. Before he had what seems like a classic TLE hallucination and the resultant graphomania, he had written forty-odd novels in twenty-five years. After the episode, he begins this period of interpretive, speculative writing, and he amassed a 3,000-page handwritten manuscript dedicated to an attempt to account for this period of hallucination. He also continued, sporadically, to write novels that were publishable. The writing is extremely different, of course, because one is a private, enormous manuscript that has no clear beginning and end. In fact, he sort of began it

again anew every day. He didn't continue, he would just set out again to finally get to the heart of this. And the 3,000 pages are an endless pile of beginnings with no internal coherence or structure. And yet in that same period he sometimes went back to his desk and wrote a novel. I'm very curious about these differences in writing that you describe—the attempt to make it coherent or communicative versus the pure mania.

Flaherty: It might be better to see that—not that it matters too much—in terms of a manic episode, and that it lasted so long, and he had, I think, a history of that kind of thing before. Sometimes I want to step back and just say, “Why don't we take the framework that he put on it,” which was really that he had a religious experience and that he was trying to understand that. Just as many writers who we consider more classically religious—Theresa of Avila or Saint Augustine—wrote about their experiences and spent the rest of their life trying to understand that, that's what he felt he had to do. And for me to come along and say, “Oh, he had a hypomanic episode or a manic episode,” certainly misses the point from his point of view. And I don't think we always want to step away from that.

Lethem: Well, I don't—

Flaherty: That's why his writing, I think, did pretty much taper off to the public writing. But he wasn't completely crazy; he could write books, as you were saying. So he was trying to write to understand something, and that's a very different model from the one that you were presenting, that probably both of us were thinking about. Many people, even if they're writing a journal, they are not, maybe, writing for an audience, but they are trying to figure things out. Who was it that said, “I don't know what I mean until I see what I say?” It's that process of using words on paper to make our thoughts cohere. That's a very sane response to an experience like that.

Levy: I don't know if you were misinterpreting me, but I think that I was saying that somehow the trauma is the obsession.

Flaherty: No, I meant what you said earlier about needing to tap into the part that didn't make sense.

Levy: The imagery, primarily.

Flaherty: Yes.

Levy: It's funny, do you remember, Lois, when we had the Henry Darger film here—the outsider artist?

Oppenheim: Yes, absolutely.

Levy: So Henry Darger—I don't know if you're familiar—he also created a book 3,000 pages long. What's the name of the story? I don't think it's ever been really published, the whole Darger thing. But it sounds a little bit like what you're talking about with Dick.

Lethem: A total hermetic project. No, they definitely haven't published Darger's manuscript, nor have they published Dick's—*Exegesis* is what he called it.

Levy: I think you bring up an incredibly interesting point, because the way we're all describing these as interior—the impulses are intrapsychic events that have little to do with that impulse that you talk about later in the book, the graphomania impulse that Milan Kundera talks about, the desire to be published or heard.

Flaherty: I think he might actually lump us with them in that we're all talking about intrapsychic events because we lead fairly comfortable lives. People who write war memoirs, or people who write about political movements and stuff, who have lived through external events, they write about those events. They don't write about the kinds of things that I, growing up in suburban New Jersey, want to write about.

Levy: But there are anomalies, too. *From Here to Eternity* is an anomaly, and *The Naked and the Dead* is an anomaly because—okay, so maybe there were a thousand war novels that didn't get published.

Flaherty: Right, the things that people want to read and the things that people want to write are very different.

Reyes: No one wanted to read Darger. No one would ever imagine that such a thing could exist. And he was able to do such a thing because he never had a reader in mind.

Oppenheim: Well, we don't know too much about his inner life, but he certainly did appear to be schizophrenic and had no relationship to anybody outside. He did his little job that he did to support himself and then he came home and worked compulsively on this art story that he created. But he had absolutely no contact with anyone ever.

Flaherty: But lots of people who are schizophrenic and have very poor interpersonal relations still have a desire—I think you're probably right that he was doing it mostly for himself. I'm just saying that we maybe don't want to pigeonhole schizophrenics as being completely uninterested in the rest of the world and withdrawing from the rest of the world.

Oppenheim: I was just talking about his particular case.

Reyes: Suddenly, hearing you, it came to me the term *horror vacui*.

Levy: What's the term?

Flaherty: *Horror vacui*.

Reyes: The fear of emptiness or of void. I don't know if it is connected to hypergraphia. Outsider artists often have to fill every inch of a paper. They kind of have what's called *horror vacui* in a certain way. But I don't know if it's a myth or if it's something you have researched, Alice.

Flaherty: Some people argue that it's especially characteristic of schizophrenic art, but probably most of the people they're writing about are schizoaffective: they have mood swings as well. But hypergraphic people tend to do that, like the example in that book where a person is writing over a page twice—it's a perfect example. Some people argue that you're trying to get every ounce of meaning out of everything, or put meaning into everything. Meaning is sort of the crucial variable there, and you want to have everything, every inch of paper, mean something.

Lethem: It's just so funny how proximate some of these activities are to such apparently admirable or well-socialized activities. When they went through Graham Greene's manuscripts at the end of his life, when he left them to the institution that he did, some scholars were puzzling over numbers they were finding in the margins of his pages. And then another novelist came in and said, "Oh, he was counting words." He just sat there, and when he was at a point of hesitation, he'd count how many words he'd written.

You talked about Charles Crumb, R. Crumb's brother. Well, what's so compelling to me about Charles Crumb is he effectively turned himself into the cartoonist's equivalent of Jack Nicholson in *The Shining*, typing the same sentence over and over again and just filling a manuscript box—this compulsive marking. But what's so striking about it is how close his work is, before it degenerates to that point, to R. Crumb's. And R. Crumb's work is so—he is a Bruegel. He's an unbelievably generous and fecund imaginative artist. He's also kind of pornographic and unpleasant at times, but he's unmistakably a real artist. And yet there is this resemblance to Charles's work in that he draws the same thing over and over and over again. He draws these panels and there's this obsessive marking and filling pages. There's something in the activity that is so proximate to his brother. One translated it into an expressive gesture and the other found it spiraling deeper and deeper into this kind of useless, physical compulsive behavior. But they're so close together. And we are all of us filling pages, filling manuscript boxes, counting words, whether the results enshrine us, like Graham Greene, in some kind of pantheon, or not.

Levy: He wrote a certain amount of words per day, wasn't it? He wrote 500 or something.

Lethem: Well, there are lots of writers who would talk about the exact number of words they write a day.

Oppenheim: Or at least the number of pages.

Levy: And he had a peculiar way of recognizing it, actually. He sort of knew—he could tell. I guess it was just the typing of the typewriter.

Oppenheim: Do you have any particular things that you impose upon yourself? Can you write anywhere, or do you need to be in your study? Do you need to have your books surrounding you, or can you write in a library? Can you—how free are you with your writing talent?

Lethem: I just call Francis, and if he's done all his pushups then I can start working.

Levy: I have to do the same activities. I have a very ritualized activity.

Oppenheim: But does that spill over into your writing activity?

Levy: It's the whole thing of overcoming, of dis-inhibiting, again. In your book, again, you mentioned Conrad and how much difficulty he had writing. And then the wonderful part where he talks about the fact that he has no style; after all this writing he has no style—one of the great stylists of all times, even though he was of Polish ancestry.

I've been writing for thirty years now with dubious result, some might say. But I've been actively writing for thirty years. What I used to do is I would sit there all day long waiting for things to write about. I would sleep; I always wrote the whole day. But what I did was I changed this whole activity at a certain point. I think I had had an accident, actually, that fomented the whole thing. I broke my leg while skipping rope, actually. I skipped myself into a broken leg in the process of trying to build up this energy. And I started to write in this very kind of programmatic way. Instead of trying to wait for the whole thing to appear before me, I decided that I would write one paragraph, one poem, and then another paragraph. I would have to do these three activities. I would take the mountain and turn it into a molehill. That was my way of dealing with it. I would take away the whole prospect of greatness. It was kind of what I regard as a kind of a narcissistic activity. If I could complete something, if I could set the standard low enough and I could succeed in completing the activity, the activity became its own satisfaction.

I no longer was concerned with the result of the activity. It was really an enormous change that's freed me up. I don't have a day that I suffer from writer's block. I simply am always writing. I start off with one paragraph, then one poem, which is a form of working out in poetry that has turned into thousands of poems, and then another paragraph.

Oppenheim: What about your critics? If you ever get a bad review, does that have—?

Levy: We'll have to wait and see. That reminds me of a funny thing I was telling Ellen Fertig today. I described to my friend Rocco Landesman how, when I'm writing humor—I've published many humor pieces over the years—I sit there and roar. And he once said to me, "Do you realize that what you find funny, others might not?" It's this whole—you might call it masturbation—I mean, I create a universe in which I make my own bed.

By the way, in answer to your question about where this is, I do it everywhere. I never miss a day. I was in Nigeria last year, and I didn't miss—I wrote on the plane. It's all worked itself out. It has to be compulsory. I also write in a journal every single day, three pages on the small college ruled journal. It has to be. That sets the stage. Now, this is a highly compulsive form of activity, and when I don't get to do this and my skipping rope and my other activities, I have the definite feeling that my whole world is falling apart. But I don't let it fall apart.

Flaherty: I have to speak up because I have to give a little speech now, which is the use of the word "compulsive." I think all of us use that word in two very different ways, when we should make a distinction between the kind of compulsion—think of there being two drives: drives toward something, and drives fleeing away from something. When we think of obsessive-compulsive behavior, that's generally a fleeing from it. And then what you describe in your

compulsive writing—that’s something that you get pleasure out of; you’re doing it for fun. People with OCD are generally not having fun doing it and they wish they could stop. The reason that that’s important is because all of us—the way we use anxiety to motivate our work. I think this might be true more in academics than it is for, at least, some writers. But the idea that you have to stay anxious in order to work—you know, people will say, “I can’t not worry about my reviews,” or whatever. There’s a fair amount of evidence that that kind of motivation actually doesn’t tend to produce very creative stuff. It produces flight behaviors. You might produce something that is adequate to not have the bad thing happen. But the kind of exploratory urge is very different, and these are different systems in the brain. One tends to be driven by dopamine, one tends to be driven by low serotonin, and one is involved in activity of the nucleus accumbens—correct me if I’m getting over the top. One is more involved in anterior cingulate, and so forth. And so although they can blur together, if you use the word “compulsion” too freely, you can start thinking, “Yes, I need to get myself anxious to work.”

Oppenheim: I’m not sure that’s what Francis was describing.

Flaherty: No, he wasn’t. He was talking about—this is a tangent—this is me getting all zippy about it, because so many times when people use “compulsion” in one sense, it can be interpreted in another way to be like, “Oh, he’s obsessive-compulsive in the more traditional sense.” What he was talking about—

Oppenheim: What he describes as his need for ritual sounds to me a little bit more the second definition you gave, rather than the first.

Flaherty: Yes, he’s doing it to—

Oppenheim: It’s not necessarily—I see the pleasure thing and the fleeing thing very much conflated in what he’s describing.

Flaherty: Right, well, except that you’re clearly in two different moods. Even your body language is different when you talk about the two different things. When you were talking about your rituals and talking about them disinhibiting you, I think—I don’t know if you’ll concur or not—it looked like you were talking about rituals that are calming, and that are useful because you want to get rid of the anxiety—

Levy: Tremendous anxiety. Waking up for me is the worst thing on earth. Every day is a horror show.

Oppenheim: Twenty-seven years of analysis, four days a week.

Levy: By the time I get to my analyst, I’m in a fantastic mood.

Oppenheim: Okay, I think we can open it up to the audience now if there are any questions. I’m sure there must be plenty. The woman that was dying to speak is no longer here?

A: I was thinking of Fitzgerald a lot when you were talking, because often when he described writing he would say that his first draft was the draft of inspiration—whatever had come to him. And he would often write, especially his Saturday Post stories, through the night with all this coffee. His second draft was critical, looking for structure and his romantic take on language. And in the third, he would always say, he tried to bring the two together. Which isn't to say that everything he did had only three drafts, but a lot of his short stories did.

Speaking as a writer and a filmmaker, I have writer's block a lot, but I don't think of it as writer's block, it's story-telling block. Because I'm never blocked to write an email; I'm never blocked to write, even, like a journal; I'm never blocked for basic stuff. I'm blocked when I have an idea inside and I'm worried about how it's going to externalize, and I'm worried if I can make it match what I feel. That's where my block comes from. I don't know how other people feel, but generally it's an external expression thing, and can I tolerate going through the revisions to get them to match, and a lot of times I think I can't and I give up. So I was—

Oppenheim: But that's you judging you, which was my question before: do we mean by "writer's block" that there's a dearth of ideas or that we're judging them as not being the right ideas, which is not the same thing.

A: Right. I think—and this is just my take and I'm curious to see how you all feel—I often feel like writer's block or storytelling block is the critical mind—and maybe it's located in one part of the brain—taking over, and the fear and anxiety. And the hypergraphia is the more childlike, primitive, inspirational kind of creative mode that takes over. Generally, to be an artist, both of those have to operate. Because if you're just rambling, nobody can go on the journey of your piece, you know? But if one fully takes over—if the critical voice takes over, you can almost never tolerate those first couple drafts. So I'm just wondering what you think about that.

Oppenheim: Pedro?

Reyes: I think there is a therapeutic answer for that. I think that you should do the worst story that you can think of, and then make a movie and shoot it really, really badly. Bad actors, bad lighting, bad editing. And then invite your friends so they trash it and really tell you how bad it is. Make your worst scenario come true and then you will be cured.

Levy: I love it.

A: Question: suppose somebody has written poetry for a while, and then there's a crisis. And after that, the person, who is a poet, no longer wishes to write poetry and won't write poetry, and then years later will write, and write all the time, and maybe write memoirs and revise and revise and revise. What has happened inside? Has anything happened within the brain, chemically, to make this change? Plus, there's the idea of development, which the novelists talk about, because there is a development in writing. Has anything happened within the brain—different chemistry within the brain—as that person develops? He still has this compulsion to write—not obsessive-compulsive, although some people might think obsessive-compulsive—but a compulsion to write. But what has happened physically to that person?

Flaherty: I think there are two different answers. One is to say that, because I believe that the mind comes from the brain, sort of as a point of faith I would say that something in your brain has changed if that happens. But of course all of us want to know, “What was it?” That’s going to be hugely different depending on what kind of crisis it was, what drove the person’s writing originally.

I would hate to over-generalize, but let me give you two short stories: one is about somebody whose crisis is that they become depressed. It almost doesn’t matter why they become depressed. We now have a pretty good story about what happens in the brains at least of many people who are depressed: you get increased anterior cingulate—down at the base of the cingulate activity, there are neurochemical changes. Now because of the use of brain stimulators to treat depression, we can see what happens to people who often will report many cognitive problems. They’ll say, “I can’t write, I can’t think anymore.” With these stimulators, when they are turned on in surgery, the person often becomes un-depressed instantly, at least for a while. The odd thing is that their cognitive facilities all come back instantly as well. So it’s not like they were also demented as well as being depressed. The model is that their attention is constantly being devoted to dealing with their psychic pain, just as when you’re physically ill, you have to spend all your time figuring where to put your feet so you don’t fall over. It’s very hard to write a novel with your limited attentional resources all being spent on keeping your feet in the right place. So that’s one story: simply, your attention might be diverted elsewhere to what your crisis is.

Now, your question was then to add in, “What if they can write all these other things.” Then I’m going to have to start waving my hands and say that if certain issues around poetry are much more emotionally charged for them that might become a particularly difficult genre. But I want to tell a story of mine, about a former patient who came to see me because she had switched from writing creative prose to poetry after a head injury. She had two questions. One was whether she was too brain damaged to have children anymore, and the answer was no, because she was still reading Wittgenstein and understanding it, so that was easy. And the second was why she had switched to writing poetry. The best story that we could both put together was that she had actually had very impaired attention because of her head injury for a long time, and it was hard for her to get a whole paragraph into her head. But she could chew and chew and chew on a metaphor or a line, and in fact became quite good and got several back-to-back poetry fellowships and really just changed direction, in part because of this temporary blockade to her ability to deal with too many words. That’s not a very common example, and I just bring it up because it was kind of interesting.

A: I write 1,000 words a day. I was on the train today and I think I came pretty close—about four hours. You were talking about right parietal lobe strokes, and mentioned that people can’t form shapes. And then you seemed to be distinguishing between different kinds of intelligence: symbolic and more immediate intelligence. Can you maybe talk about what’s not immediate about symbolic intelligence and what’s not symbolic about immediate intelligence?

Jacobs: As an analogy with music, for instance, or language, the left hemisphere is dealing with grammar, syntax and the meaning of words, and the right hemisphere is dealing with the way you use pitch and tone and pace and the spacing of the sounds to convey meaning, which are

very psychophysical aspects, whereas words have this symbolic meaning. In music it could be the reading of the notes as something that is symbolic on the scale, whereas the sound is a more right hemisphere thing—the melody and whatnot.

A: I'm a journalist and I do not write 1,000 words a day. Don't tell my editor. I don't know how many of the artists who have done some of the work on the walls are in the room. I know Jon Sarkin, who has done the art right over here. I know that Alice, who I met a couple years ago at the Neiman Foundation, met Jon and talked to him a lot. I wonder if you could talk about, in Jon's case, his brain injury from a stroke, and the mixture of the obvious hypergraphia and the art in his work.

Flaherty: Because Jon's brain injury is a little atypical, it doesn't quite fit nicely in my model, so I would like to just kind of move past it. Jon, is it okay if I use you as a case study? You're not actually a case study. You don't fit well.

Sarkin: Sorry.

Flaherty: He had a cerebellum injury from a surgery, and then a stroke. The cerebellum is not an area that we actually like to think of as being involved in cognition and emotion. We think it involves coordination. Recently there has been some work done by people like Jeremy Schmahmann that argue that no, it has some emotional and cognitive role. You know what, I just have to leave it at that, because the cerebellum is just, like, a big mystery when it comes to those factors. But I was tempted to use you as an example of that *horror vacui*, in a way, because if you look at some of these works, Jon wants to pack all this stuff in. Me, I like that kind of thing.

Sarkin: It's interesting—I had a SPECT exam. Does everyone know what that is? Obviously you guys know what it is. It's sort of a more functional—it's like a functional MRI kind of thing, where they inject some kind of radio isotope into your vein and they look at the oxygen uptake of the brain. And if you do a straight MRI, you'll see that my left cerebellar hemisphere is lopped off. That's an obvious, gross morphological thing. But on this you're able to see that there are areas in my cerebrum, on the left side—the parietal lobe is anoxic. It's not functioning properly. So I think that the artistic weirdness I'm exhibiting is not so much cerebellar deficit, but functional cerebral stuff.

Flaherty: Wasn't that the scan that was missing when we did that TV show together? I wish I had seen that. That's so cool.

Sarkin: Yeah, but politically it's very dicey. That's why you didn't see it.

Jacobs: It's like diathesis. There's a cross network to the prefrontal lobe from the cerebellum. You hit the network in the cerebellum, but it's going to make the network not work.

Flaherty: That's better.

A: Sorry, but what do you mean by “artistic weirdness,” Jon?

Sarkin: Does somebody have a question for me?

Levy: Can you come to the microphone?

Oppenheim: He didn't hear you. Perhaps we could just have people repeat the question to avoid a lot of this shuffling.

A: "Artistic weirdness"—what do you mean by that?

Sarkin: Look at this stuff.

Flaherty: He used to be a chiropractor. That's weird that he started doing that.

Sarkin: Look at this stuff.

A: It doesn't look weird to me, so I'm asking.

Sarkin: If that's not artistically weird, I don't know what is.

Flaherty: That must be because you're an artist. It looks weird to chiropractors.

Sarkin: I don't know. I can't verbalize it any further than that. That's why I do this art: because it can't be verbalized. It's a verbal, right? It's artistically weird; it's artistically abnormal. You've never seen anything like this. What he said was very interesting: that I do my art to not think—not to think. If I'm doing my art and thinking—

A: I'm not asking why you do your art. I'm asking why do you think your art looks weird?

Flaherty: Maybe one way of putting this in context is, to some extent—and I don't mean to pigeonhole you—but you're a little bit of an outsider artist. His art looks weird to the community that he was in. He started doing it very spontaneously. It looks weird to non-artists because he was supposed to be doing something else. To some extent that's what you mean. Obviously, you also see your art as different from everybody else's art in the way that all artists think they're weirder than everybody else.

Sarkin: A better word would be "real different, really unique, real abnormal" in the meaning when you think something is normal. "Abnormal" doesn't mean bad abnormal, it just means off the C curve. Normality is like that Gaussian curve underneath the bell. And then you have all this stuff that's out of the bell—that's off the grid. This art is more off the average. That's what I mean by "weird."

Jacobs: It kind of makes sense to me. The cerebellum is an error detector. There's a motor program that's planned, and then there's the execution of it, and the cerebellum is always updating how successful it was in making minor corrections to make it work. I guess its cognitive influences would be somewhat similar. Psychic ataxia—I don't know if that's a term,

but there's nothing to correct whatever is intended and whatever comes out, so it has a fragmentation.

Levy: People you've studied in your work—for instance, Richard Gilman used to say that new forms seem like the absence of form. In Beckett, you talked a lot about the varying kinds of, not only psychic issues, but also kind of physical issues that influenced the production of his work. When Beckett first started to write, what he would have written would have seemed—we've now absorbed and we've conceptualized it, we've represented it as familiar. But at first only a small group of people appreciated what Beckett was doing.

Oppenheim: I think that's what we mean when we talk about something new in art. That's what makes it, to me, interesting. Because it's innovative, because it's new—we keep talking here about creativity—that's what creative is.

Levy: Isn't it true about Mr. Sarkin's work?

Oppenheim: I think so, and that's why I had a hard time understanding exactly, as you did, what the meaning of "weird" was.

Nersessian: But it's his subjective experience. It's different from somebody else's.

Oppenheim: Right, but—

Nersessian: He also may not have said what I'm doing is weird, because he could have also done other things. He feels it's weird. He thinks it's weird.

A: It's okay to ask why. I'm not denying anything. I accept everything.

Nersessian: It's his experience.

A: Accepted. He doesn't want to understand it better.

A: But there has to be an objective knowledge of what is art. You have to be somewhat knowledgeable about art to know the gentleman's work is art. Someone like me, who doesn't know anything, I might like it, but, you know, that's okay too. But if somebody else who knows art sees something valuable in it, that's good. Everybody moves.

Oppenheim: Well, that gets into a very big, vague area that I don't think we can tackle here. Yes?

A: I have a question that's totally in a different direction. I was wondering if the MDs could talk a little bit about deep brain stimulation and transcranial magnetic stimulation and how that—

Flaherty: And what?

A: Transcranial magnetic stimulation, and what that is going to offer to the understanding of these disorders.

Flaherty: This would all be very off the cuff, in that these are not techniques that are used much to study artistic ability. Just briefly, transcranial magnetic stimulation allows you to sort of excite or suppress cortical areas very quickly without drilling holes in the head. And so you can imagine saying, well, do we think this area of the brain is important for creativity, and then shut it off and see if people can be creative. A guy named Alan Snyder claims to have done the opposite thing in Australia, where he took people, mostly his graduate students, put them in the scanner and showed that they became more creative according to his criteria, when he was stimulating an area which he believes to be—what does he claim? First he was saying it was the prefrontal cortex, and then it was maybe including a bit of the temporal lobe. I should say, although these are very interesting results, they haven't yet been replicated by anybody. But he would have graduate students who would go in drawing like sausage dogs, for example, and as he was stimulating them they would draw these very much more elaborate dogs, and he had various theories about the nature of art based on that. They also could do math better, he argued. So that's the kind of thing that it might help you anatomically to learn if you could go in and play with people in a non-permanent, non-dangerous way, play with their brains like that.

A: Well, is there any value, though, in kind of pinning down the regions of the brain that—

Flaherty: I'll tell you one value. Let's say you're writing a paper and you want it to be creative, and you have a little hat that'll allow you to—that sounds like a joke. It's certainly not in the works. It sounds scary, or like a joke, but it's actually not a joke, and considering that there are many situations in life in which you're desperately in need of creative solutions, you know, political ones and so forth. The idea that we should just rule out hats like that because it's creepy, it's controversial, but the fact is that already there are people who have electrodes in their heads permanently implanted that control their moods, that control their activities, and that's stuff that goes on right now. Now, luckily all those people have their own little access devices and they're allowed to regulate their voltages, too, but that's a scary thing, because somebody else holds the clicker. But this is all happening. This is not science fiction.

Jacobs: Is the nucleus accumbens where those electrodes are?

Flaherty: Some of them. This gets really complicated, but there's actually one group that has a use patent on one area of your brain you're not allowed to put electrodes near, believe it or not. And everybody else puts them near the accumbens because that's free. This is just for depression.

Jacobs: But that's the ultimate allegory of public domain and privatization.

Flaherty: Isn't it? You thought you owned your own brain, but not if you're going to put an electrode on it.

Levy: We have another question over here.

A: Yeah. I have a question for Alice. It's a question by way of a movie recommendation. There's a movie out now called *Control*, which is about this guy, Ian Curtis, who was a singer for a band in the late '70s called Joy Division, and he was epileptic. He was incredibly prolific and productive in his brief life and wrote a lot of lyrics and poetry that were very dark. And he ended up taking his own life at the age of, I think, twenty-three. But one of the more striking moments in the film is when he describes being on stage and what it does to him, and he says, "The audience wants me to do this more and more, and they want more songs and more poetry. They have no idea how painful it is for me when I'm going through this." It was interesting because you said people who come in with hypergraphia don't necessarily want it to be cured, because it represents something very productive. But do you know of, or have you experienced scenarios where it's actually painful to be undergoing something, where this stuff needs to come out of you?

Flaherty: Absolutely. And I'm sure that real artists, rather than 'faux artists' like myself can describe that even more eloquently. But one person who did was Kierkegaard, who once had an allegory where he said that a poet is like a person whose lips have been so malformed that when he tries to cry out in pain beautiful music comes out. And everyone gathers around him and says, "Oh, cry out again, you make such beautiful music." So I think that fits that scenario pretty well, the Joy Division one.

Oppenheim: Pedro, tell us something about what you're feeling as you do that, and how much you need to do that, what you will do with those cups when you're done here this evening.

Reyes: I mean, like, this is just killing time—I mean, not killing time, but, how to say—no, perhaps I say something, because I was thinking that often the brain enables the mind. I was remembering a phrase, which I think is T.S. Elliot, which says that wisdom was kind of replaced by knowledge, and knowledge was replaced by information. I have a certain idea that even though the study of the brain is relatively recent—like Ramon y Cajal or someone, the best people to study the brain perhaps were like one hundred years ago, or even less. The mind has been studied for a very, very long time, like 3,000 years, perhaps. Surely the brain informs and enables the mind, but the mind also shapes the brain. So it's very interesting, all this kind of plasticity that the brain has.

I have like a short theory that I haven't written down very well that has to do with mythologies particular to the United States. For instance, in Mexico we have this idea of the guiding animal, which is common to many cultures, like a dog that will lead you to the underworld or something. Here you have certain mythologies about guiding animals that also take you to these kinds of virtual worlds. For instance, in *Star Wars* Luke Skywalker is guided by R2D2, which is a kind of robot. In *Tron* the characters are guided by a cursor kind of a thing, so they go into this virtual world guided by the cursor. The *Knight Rider* is like a car, no? So the car is like the guiding animal for this hero. I mean perhaps this is kind of embedded in popular culture, but if you look at the rest of the world, like in Europe—perhaps in Japan they do that, because they're also kind of enticed by technology. But it's hard to imagine in other cultures that someone will create a drama or a myth where a kind of an instrument or apparatus is the guiding animal. I think that it's very peculiar to, very characteristic of, US culture to have guiding animals that are either robots or cars or computers, no?

Talking about the mind, so often the mind is kind of considered almost a too esoteric word. We feel more comfortable talking about the brain. And I'm just thinking about those two worlds.

A: I'm a published journalist and propagandist. But my brother, my late brother, was a schizophrenic, from the age of fifteen until he died at the age of fifty-four, and he was, I guess, hypergraphic in that he filled thousands of journals and pages and scraps of paper with poetry and writings throughout his life. And some of them were actually clever, and some were kind of hard to follow and incomprehensible. My question: is there a connection between someone who's had a cerebral injury and engages in that kind of expression, someone who has temporal lobe epilepsy, and someone who just has a mental condition that doesn't seem to have any physical origin?

Jacobs: I would just say that, as an aside, the only reason you say schizophrenia doesn't have a physical correlate is because we don't understand brain chemistry yet. It's in its infancy, and someday we'll know a lot more about what's wrong physically with the brain that causes schizophrenia. It's probably in receptors and sub-networks. We just don't know yet.

Flaherty: But we could also—oh, were you going to keep going?

Jacobs: No.

Flaherty: I'm so bad about interrupting. We could also go further, and what we do know about brain activity in schizophrenics. For instance, when they're having auditory hallucinations they have abnormal activity in the temporal lobe. And their temporal lobes are different sizes, especially in the medial part of it. So this is not to say that schizophrenia is the same as being a writer, and in fact there's a study somebody did comparing schizophrenic poets to college poets, which are both kind of scary groups. But the difference was that the schizophrenic poets, whose writing was often very unusual, didn't edit. You know, our definition of creativity, a lot of people use the term in the sense that it has to be novel and useful. Their writing wasn't seen as being useful to non-schizophrenics, because they had different issues. Now, maybe schizophrenic writing is of interest to other schizophrenics in a way that it might not be to us. You mentioned about your brother writing bits that were really quite good, which wouldn't be surprising at all, but he wasn't winnowing out stuff. And sometimes it's not the writer that does the winnowing out. I mean sometimes it's the editor. But that again points out the process that you were talking about, the whole balance between primary process, generating the ideas, and then secondary editing and making sure that they're relevant to the listener and so forth.

A: I'm a science journalist. I'm in graduate school here at NYU. And my question is actually, what do you mean exactly when you say that you need to tolerate uncertainties? I was just wondering if you could expand upon that?

Lethem: Sure, I'll try. I mean I don't often think about this in neurological terms. I think of it in terms of the language of temperament, or inclination. I have an appetite for attempting tasks that not only do I not know how to do, but nobody else can help me with. That would be one description for tolerating uncertainties. And I've also come, in my own experience, to the novel

as a particularly unruly and extensive form of artwork. I mean there are very, very few novels with a kind of persuasive internal architecture that anyone can point at, if they go beyond one hundred pages or so. There's just too much stuff. The secret to novels, I think, is that they are a pile. They're an accumulation. In a way they're a journal of impressions with the kind of electricity, in a Frankenstein sense, shot through them of causality or thematic unity that seems to make the pile stand up and wobble around and do a wonderful performance. But the truth of them is that there's too much matter there. There are too many individual moments, too many connections between words in sentences, sentences in paragraphs, paragraphs in chapters, and also too many different possible realms of activity. There's plot and characters and description and symbolic material, and kind of literal or documentary material in them. There's absolutely too much there for them to obey any kind of formal rules. So if you have an appetite for activities that can be made either scientific or kind of crypto-scientific by being given a set of instructions, stay away. You're in a hopeless realm.

Flaherty: I wonder if something that might be going on here is that probably psychoanalysts think of tolerating uncertainty in a different way from what you're describing, which you put better than I do, but maybe you could say it's taking risks. I think often psychoanalysts use that, like when they're talking to splitters who want to see everything as either black or white, and they'll say, "No, no, really, everything is actually kind of gray." And then somebody else might say, "Well, that's not tolerating ambiguity. Ambiguity is seeing everything as black and white at the same time." That might be the artist's approach.

Lethem: That's interesting, yeah. I mean the other description, the other way I would distinguish this from the real world toleration of uncertainties, which we all as living beings have to go through, is my choice, and it can be seen as quite a lot safer than the real life experiences, for tolerating completely artificial and invented uncertainties. I'm not out doing anything that's going to—you know, my patients can't die. They can just sort of fail to live.

Levy: Can I add to that? I think it's a very interesting idea. I think it's a very interesting question, by the way, that you just asked, because I think it's a part of making artwork, in a strange way. I mean it's something that I was alluding to before, and I think the process kind of is—in my own experience of living I kind of create a conceptualization of things that enables me to sort of reduce them and to function with them, so that I have a whole cast of characters who have populated my life, and they've become mental representations in my mind, including my analyst, who's become a thing in my mind. What goes on in the process of making an artwork—and I don't know what the drive to do this is—is almost a kind of act, to use a Kant expression, of deconstructing it. I'm taking it apart. Like we were sitting here earlier in the evening, and I said, "Well, this is really strange and I feel bad about this, but I've never really had a chance to look at you, because the minute I met you I created a Lois in my mind." But if I was a portrait painter I would have to start to take your face apart in order to paint you—the lights, the darks—and I would sort of see anew, and that's a rather frightening process by which you start to see. You know, even my own children, the people around me, they have all become part of this cast of characters, which are a Kantian invention. They have phenomenological significance for me. Again, why one does this, why one wants to do this, that is really the question. You say you have a propensity, which comes out of a counter-phobia, it sounds like, about the cast of characters

that populate the universe that you exist in. I mean it sounds like that a little bit. Sorry if I'm being presumptuous.

Lethem: No, that's good. I like thinking of it as a counter-phobia. But I mean the one last detail—this may just be to satisfy myself—of the description I was groping towards in answer to your very nice question is this idea that, in my experience of writing the kind of things I write, there are always only extremely local solutions. You never hit any global tools. You just fail and fail and fail, and then you fix something and it kind of works and you move along to the very next area of total failure and prop something up and make it work just well enough and move forward. But there's no, you know, if you need to believe that you're going to kind of learn how to do what you're doing, it's a very bad career path.

Levy: And there's no justice in it, either. There's no justice. It's like Alice was talking about before when she was talking about my self-description of being compulsive. One can do things for all the wrong intentions. One could have created a universe for any particular form of reason, but within the context of the thing one's doing, the perpetuation of the system that you're making, it either can turn out to be something in which all these connections you've made sort of come out a glomeration of all these intrapsychic and neuropsychiatric events that turn out to be something rather interesting and appealing to human nature and have some sort of base to attach themselves to history, or not. There's no justice in it. There's no saying that one person's methodology is going to guarantee some sort of connection to the world that we know—I mean, it seems to me, in my own experience.

Lethem: Yeah. You better find other satisfactions in life.

Oppenheim: Well, I think we've raised a lot of very interesting questions tonight, even if we haven't found all the answers. So I would like to thank the panelists very much for participating.