Sunflower-I. *Sunflower One.*

I keep putting the damn patch down on my bedsheets and then picking it back up. I run my fingers over it as though its stitched ridges might offer some essential clue. The sunflower it depicts is in full, stylized bloom. Spirals of seeds decorate the center. It all suggests some military or spacefaring origin, and I find myself searching the web for the phrase: *sunflower-I. sunflower program deng jinghan.* There are literally one million results on the Soup, of course, and the only way to filter out the Sieve-related stuff is to sort oldest-first. There was a strongwave detector called Sunflower on a Jupiter mission a few years back. There’s a symmetry group that mathematicians have given the same name…

I plug in *sunflower fudan university*. Nothing.

*sunflower deng jinghan* is a mess. There are papers claiming to have co-authored the Sunflower Sieve with Deng Jinghan four whole years ago. This stops my heart for a second, until I peek at the timestamps: they’re from more like four hours ago. The Soup is rife with malicious actors, and confidence in anything comes only with consensus, with very large numbers.

Reluctantly I type in plain old *Deng Jinghan.* My finger hovers over the Enter key like a gavel.

She ranks as the #9 all-time most cited author on the Soup. Her affiliation and ORCID and bokeh-framed YINS headshot come with a big fat green checkmark. I flip through her old work. I’ve seen all this before; back at Stanford I devoured it in weeks. I sort back-to-front, scrolling past hundreds of papers until I arrive at her latest, my first: *A Generalized Inversion for Sunflower Sieve Debris.* There are already 58 comments, most “hidden by author” for thickening the Soup with more bold-faced lies.

One claims that Deng stole the inversion from a small neikotics firm downtown. It offers leniency if she agrees to settle quickly and privately.

Another advertises a chakra-clearing technique inspired by Dr. Deng Jinghan’s work. (I bookmark this for later.)

A third offers free, high-quality neikotic pleasure protocols. Click here!

A fourth has a green checkmark next to the name.

{.mail} **Dr. Zhang Peifeng***Applied Neikotics - Fudan University*22 minutes ago  
  
I lament that you continue to ignore my messages and comments. There is something I need to show you related to the Sunflower Sieve. I urge you to check your inbox with all possible haste.

It’s easy enough to verify from Fudan’s website that Dr. Zhang Peifeng is a real guy, and that it’s really his public key on the Soup. A minor figure, sure, but a minor figure with tenure — and for days he’s been leaving comments all over Deng’s body of work, his wild-eyed urgency cresting over the course of the week. *I urge you to check your inbox with all possible haste.* My head spins with curiosity and preemptive guilt as I open a tunnel to the lab server.

{.mono} $ nmcli con up id yins-vpn  
$ vsc denglab.safety.yins.edu -p 4238  
  
username: root@denglab  
password: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

This is not just low, Mona, it’s *dumb.* Why would she log onto the Soup on the lab machine? Okay, I had watched her do it, as we submitted our paper. But it would be stupid, really, for her to stay logged into the Soup on the lab machine. There’s no way she’s logged into the — oh, for fuck’s sake, it’s *bookmarked.*

She’s logged into the Soup on the lab machine.

Oh, really, I mustn’t.

I force a few deep breaths. I clutch the sunflower patch: somehow I’ve gotten it through my head that it’s very old, something about the font and the stitching, but it might easily have been printed yesterday. I’m not going to do it. I’m not going to do it. I’m going to close the —

*Click.*

The first message from Dr. Zhang Peifeng reads as follows:

{.mail} Dr. Deng,  
  
I hope this finds you well. I offer heartfelt apologies for both the long lapse in correspondence between us, and thus for the intrusiveness of this message.  
  
I just read your latest, *A Generalized Inversion For Sunflower Sieve Debris*. I offer commendations, along with a few comments.  
  
1. The Sieve debris is made from a nine-piece tileset which I find oddly reminiscent of our SNB-9 proposal (Zhang et al.) to the standards committee. The equations you offer in section 3.1 are clearly based on frequency domain inverses of the SNB-9 formalism.  
  
Of course Suowei got their way with SNB-12 and the world still turns. But is the dream of SNB-9 so dead that even Deng Jinghan has forgotten? Or perhaps the omission is intentional? :-)  
  
2. Reading between (or perhaps, below) the lines of your paper, I feel that we have something else to discuss. Come up my way sometime soon and we can talk it over. I still keep some chamomile handy for you.  
  
All my best,  
  
Dr. Zhang Peifeng  
Professor of Applied Neikotics  
Fudan University, Shanghai, China

Well, that was riveting. I feel a little stupid. Maybe I should be less surprised, but is a 70-something at Fudan really hounding Deng for one lousy citation? Her response is fairly polite:

{.mail} Dr. Zhang,  
  
I appreciate the note and I enjoyed running into you in Seoul.  
  
My latest was authored primarily by a student -- she’s likely too young to be familiar with SNB-9 as such. But as we always said it’s a very natural/organic construction, essentially a wrapper around Lm(3) quasiperiodic tilings in R4 so we do expect it to pop up everywhere.  
  
The dream is not dead, but you will understand if I continue to avoid explicit mention of SNB-9 in the current funding environment (long memories and all that).  
  
I will be at Fudan on 21 October for the dreaded INSI meeting. Shall we chat then?  
  
Best  
  
Dr. Deng Jinghan  
Deputy Chair, Neikotic Safety Department  
YINS, YDOZ, China

The funny thing is, I do know about SNB-9. It was part of some long-forgotten scientific slapfight regarding the set of basic tile-shapes we should all agree to use in loop-lock. Deng and her colleagues lost this battle — someone explained once that her proposal was *very elegant, but impossible to work with*. They didn’t understand why that made me laugh.

{.mail} Dr. Deng,  
  
Apologies for the tone of my previous message. I did not mean to imply an oversight on your part in failing to cite my (and your own) previous work on SNB-9.  
  
I wish to be as clear as possible without attracting unwanted attention. I direct you now to a particular footnote in your Sunflower Sieve inversion paper -- it should be obvious which one.  
  
Let’s discuss face to face tomorrow or day after. My calendar is wide open.  
  
Yours entirely,  
  
Dr. Zhang Peifeng  
Professor of Applied Neikotics  
Fudan University, Shanghai, China

Deng is getting a little snippy:

{.mail} Dr. Zhang,  
  
Said paper was fast-tracked to avoid a scoop and has some rough edges. The footnote in question is a convolution artifact from my student’s work in loop-lock. It will be removed in an upcoming revision.  
  
Best  
  
Dr. Deng Jinghan  
Deputy Chair, Neikotic Safety Department  
YINS, YDOZ, China

*The footnote in question...*I bring up the paper split-screen, skimming the footnotes, still reading the thread...

{.mail} Dr. Deng,  
  
Let me be direct: there is something I need to show you now. My current facility is not far from Fudan main campus. Please come at your earliest convenience. I stress that this is an urgent and sensitive matter with certain revelatory qualities for the entire field of neikotics.  
  
Or send your student if that is easier. As first author of the work she will likely be interested.  
  
Regards,  
  
Dr. Zhang Peifeng  
Professor of Applied Neikotics  
Fudan University, Shanghai, China

There are many unread, increasingly desperate messages that follow from Zhang Peifeng. But Deng’s last message is simply:

{.mail} Do not under any circumstances contact my student about this.  
  
Dr. Deng Jinghan  
Deputy Chair, Neikotic Safety Department  
YINS, YDOZ, China

I have a weird, hazy half-memory of what I’m looking for in my own list of footnotes. I scan them twice, seeing nothing amiss in the text, looking now for my own blind spot. And — there it is, about halfway down:

{.tex} [27] Some of which bear a striking resemblance to the structures in the Mirror Sea known as hyperlagmites.

Oh. *Oh.* I missed a spot.

There was a wave of interest in the hyperlagmites last year, and I didn’t ride it. I knew distantly that people were spotting these eerie, languid, toothlike structures on the crystalline walls of the Sea. Your gaze was like a headlamp, they explained. Look around in the right way, and you’d throw semi-script, broken hieroglyphs, into stark relief. Different angles of one torturously incomplete message revealed themselves as you moved your beam — the cave was learning to write, but it was only ever halfway there, and by now the oldest hyperlagmites were worn and soft.

It played out in forum threads, locked after thousands of pages of debate. Were the hyperlagmites evidence of Ripple material culture? And if so, why did the Ripples seem to ignore them, to let time wear them down? Or were they a mathematical curio, an artifact of the Lam-Waldmann Hash? And if so, why could no one produce their seed sequences? *You’re just hallucinating these,* most people would say. And the response was always, *no, no, you need to hallucinate harder.*

Frankly I couldn’t have cared less. Because just then Cai and I were busy chasing a Ripple, throwing ourselves into something soaking and thrumming and vital. I sneered at the thought of devoting the same mania to half-dead stone. Cai had free tickets to *Hyperlagmites: The Sea At Night*, and we caught the premiere just to snicker at the crowd’s reaction: almost no one could make out a thing. We laughed our way out of the Observatory, past the line of moviegoers demanding a refund, into the pleasantly humid April air, into the treacle-thick un-un-truth that *the entire city was a great coral reef*. I knew what I saw on those screens. There was no room for anything else.

Now, though, I’m remembering something else. Glimmers, single frames of the movie where, had I been willing to look, I might have seen. Something else, too. Rumors of a spat, not thoroughly contained: the Weather Bureau quietly insisting that the YINS Observatory pull *Hyperlagmites* from its spring lineup. YINS disobeying gleefully by padding the movie to directors-cut length. There was something in there that the Bureau didn’t want the city to see. Maybe they’d gotten lucky that most people simply couldn’t. But I’ll bet Dr. Zhang Peifeng can.

Fingers trembling, I peck out a new message in the thread:

{.mail} Dr. Zhang,  
  
Where and when do you wish to meet?  
  
Dr. Deng Jinghan  
Deputy Chair, Neikotic Safety Department  
YINS, YDOZ, China