Liking What You See: A Documentary Ted Chiang From "Story of Your Life" and Others (2002)

"BEAUTY IS THE PROMISE OF HAPPINESS." — Stendhal

Tamera Lyons, first-year student at Pembleton:

I can't believe it. I visited the campus last year, and I didn't hear a word about this. Now I get here and it turns out people want to make calli a requirement. One of the things I was looking forward to about college was getting rid of this, you know, so I could be like everybody else. If I'd known there was even a chance I'd have to keep it, I probably would've picked another college. I feel like I've been scammed.

I turn eighteen next week, and I'm getting my calli turned off that day. If they vote to make it a requirement, I don't know what I'll do; maybe I'll transfer, I don't know. Right now I feel like going up to people and telling them, "Vote no." There's probably some campaign I can work for.

Maria deSouza, third-year student, President of the Students for Equality Everywhere (SEE):

Our goal is very simple. Pembleton University has a Code of Ethical Conduct, one that was created by the students themselves, and that all incoming students agree to follow when they enroll. The initiative that we've sponsored would add a provision to the code, requiring students to adopt calliagnosia as long as they're enrolled.

What prompted us to do this now was the release of a spex version of Visage. That's the software that, when you look at people through your spex, shows you what they'd look like with cosmetic surgery. It became a form of entertainment among a certain crowd, and a lot of college students found it offensive. When people started talking about it as a symptom of a deeper societal problem, we thought the timing was right for us to sponsor this initiative.

The deeper societal problem is lookism. For decades people've been willing to talk about racism and sexism, but they're still reluctant to talk about lookism. Yet this prejudice against unattractive people is incredibly pervasive. People do it without even being taught by anyone, which is bad enough, but instead of combating this tendency, modern society actively reinforces it.

Educating people, raising their awareness about this issue, all of that is essential, but it's not enough. That's where technology comes in. Think of calliagnosia as a kind of assisted maturity. It lets you do what you know you should: ignore the surface, so you can look deeper.

We think it's time to bring calli into the mainstream. So far the calli movement has been a minor presence on college campuses, just another one of the special-interest causes. But Pembleton isn't like other colleges, and I think the students here are ready for calli. If the initiative succeeds here, we'll be setting an example for other colleges, and ultimately, society as a whole.

Joseph Weingartner, neurologist:

The condition is what we call an associative agnosia, rather than an apperceptive one. That means it doesn't interfere with one's visual perception, only with the ability to recognize what one sees. A calliagnosic perceives faces perfectly well; he or she can tell the difference between a pointed chin and a receding one, a straight nose and a crooked one, clear skin and blemished skin. He or she simply doesn't experience any aesthetic reaction to those differences.

Calliagnosia is possible because of the existence of certain neural pathways in the brain. All animals have criteria for evaluating the reproductive potential of prospective mates, and they've evolved neural "circuitry" to recognize those criteria. Human social interaction is centered around our faces, so our circuitry is most finely attuned to how a person's reproductive potential is manifested in his or her face. You experience the operation of that circuitry as the feeling that a person is beautiful, or ugly, or somewhere in between. By blocking the neural pathways dedicated to evaluating those features, we induce calliagnosia.

Given how much fashions change, some people find it hard to imagine that there are absolute markers of a beautiful face. But it turns out that when people of different cultures are asked to rank photos of faces for attractiveness, some very clear patterns emerge across the board. Even very young infants show the same preference for certain faces. This lets us identify certain traits that are common to everyone's idea of a beautiful face.

Probably the most obvious one is clear skin. It's the equivalent of a bright plumage in birds or a shiny coat of fur in other mammals. Good skin is the single best indicator of youth and health, and it's valued in every culture. Acne may not be serious, but it looks like more serious diseases, and that's why we find it disagreeable.

Another trait is symmetry; we may not be conscious of millimeter differences between someone's left and right sides, but measurements reveal that individuals rated as most attractive are also the most symmetrical. And while symmetry is what our genes always aim for, it's very difficult to achieve in developmental terms; any environmental stressor — like poor nutrition, disease, parasites— tends to result in asymmetry during growth. Symmetry implies resistance to such stressors.

Other traits have to do with facial proportions. We tend to be attracted to facial proportions that are close to the population mean. That obviously depends on the population you're part of, but being near the mean usually indicates genetic health. The only departures from the mean that people consistently find attractive are exaggerations of secondary sexual characteristics.

Basically, calliagnosia is a lack of response to these traits; nothing more. Calliagnosics are not blind to fashion or cultural standards of beauty. If black lipstick is all the rage, calliagnosia won't make you forget it, although you might not notice the difference

between pretty faces and plain faces wearing that lipstick. If everyone around you sneers at people with broad noses, you'll pick up on that.

So calliagnosia by itself can't eliminate appearance-based discrimination. What it does, in a sense, is even up the odds; it takes away the innate predisposition, the tendency for such discrimination to arise in the first place. That way, if you want to teach people to ignore appearances, you won't be facing an uphill battle. Ideally you'd start with an environment where everyone's adopted calliagnosia, and then socialize them to not value appearances.

Tamera Lyons:

People here have been asking me what it was like going to Saybrook, growing up with calli. To be honest, it's not a big deal when you're young; you know, like they say, whatever you grew up with seems normal to you. We knew that there was something that other people could see that we couldn't, but it was just something we were curious about.

For instance, my friends and I used to watch movies and try to figure out who was really good-looking and who wasn't. We'd say we could tell, but we couldn't really, not by looking at their faces. We were just going by who was the main character and who was the friend; you always knew the main character was better-looking than the friend. It's not true a hundred percent of the time, but you could usually tell if you were watching the kind of thing where the main character wouldn't be good looking.

It's when you get older that it starts to bother you. If you hang out with people from other schools, you can feel weird because you have calli and they don't. It's not that anyone makes a big deal out of it, but it reminds you that there's something you can't see. And then you start having fights with your parents, because they're keeping you from seeing the real world. You never get anywhere with them, though.

Richard Hamill, founder of the Saybrook School:

Saybrook came about as an outgrowth of our housing cooperative. We had maybe two dozen families at the time, all trying to establish a community based on shared values. We were holding a meeting about the possibility of starting an alternative school for our kids, and one parent mentioned the problem of the media's influence on their kids. Everyone's teens were asking for cosmetic surgery so they could look like fashion models. The parents were doing their best, but you can't isolate your kids from the world; they live in an image-obsessed culture.

It was around the time the last legal challenges to calliagnosia were resolved, and we got to talking about it. We saw calli as an opportunity: What if we could live in an environment where people didn't judge each other on their appearance? What if we could raise our children in such an environment?

The school started out being just for the children of the families in the cooperative, but other calliagnosia schools began making the news, and before long people were

asking if they could enroll their kids without joining the housing co-op. Eventually we set up Saybrook as a private school separate from the co-op, and one of its requirements was that parents adopt calliagnosia for as long as their kids were enrolled. Now a calliagnosia community has sprung up here, all because of the school.

Rachel Lyons:

Tamera's father and I gave the issue a lot of thought before we decided to enroll her there. We talked to people in the community, found we liked their approach to education, but really it was visiting the school that sold me.

Saybrook has a higher than normal number of students with facial abnormalities, like bone cancer, burns, congenital conditions. Their parents moved here to keep them from being ostracized by other kids, and it works. I remember when I first visited, I saw a class of twelve-year-olds voting for class president, and they elected this girl who had burn scars on one side of her face. She was wonderfully at ease with herself, she was popular among kids who probably would have ostracized her in any other school. And I thought, this is the kind of environment I want my daughter to grow up in.

Girls have always been told that their value is tied to their appearance; their accomplishments are always magnified if they're pretty and diminished if they're not. Even worse, some girls get the message that they can get through life relying on just their looks, and then they never develop their minds. I wanted to keep Tamera away from that sort of influence.

Being pretty is fundamentally a passive quality; even when you work at it, you're working at being passive. I wanted Tamera to value herself in terms of what she could do, both with her mind and with her body, not in terms of how decorative she was. I didn't want her to be passive, and I'm pleased to say that she hasn't turned out that way.

Martin Lyons:

I don't mind if Tamera decides as an adult to get rid of calli. This was never about taking choices away from her. But there's more than enough stress involved in simply getting through adolescence; the peer pressure can crush you like a paper cup. Becoming preoccupied with how you look is just one more way to be crushed, and anything that can relieve that pressure is a good thing, in my opinion.

Once you're older, you're better equipped to deal with the issue of personal appearance. You're more comfortable in your own skin, more confident, more secure. You're more likely to be satisfied with how you look, whether you're "good-looking" or not. Of course not everyone reaches that level of maturity at the same age. Some people are there at sixteen, some don't get there until they're thirty or even older. But eighteen's the age of legal majority, when everyone's got the right to make their own decisions, and all you can do is trust your child and hope for the best.

Tamera Lyons:

It's been kind of an odd day for me. Good, but odd. I just got my calli turned off this morning.

Getting it turned off was easy. The nurse stuck some sensors on me and made me put on this helmet, and she showed me a bunch of pictures of people's faces. Then she tapped at her keyboard for a minute, and said, "I've switched off the calli," just like that. I thought you might feel something when it happened, but you don't. Then she showed me the pictures again, to make sure it worked.

When I looked at the faces again, some of them seemed... different. Like they were glowing, or more vivid or something. It's hard to describe. The nurse showed me my test results afterwards, and there were readings for how wide my pupils were dilating and how well my skin conducted electricity and stuff like that. And for the faces that seemed different, the readings went way up. She said those were the beautiful faces.

She said that I'd notice how other people's faces look right away, but it'd take a while before I had any reaction to how I looked. Supposedly you're too used to your face to tell.

And yeah, when I first looked in a mirror, I thought I looked totally the same. Since I got back from the doctor's, the people I see on campus definitely look different, but I still haven't noticed any difference in how I look. I've been looking at mirrors all day. For a while I was afraid that I was ugly, and any minute the ugliness was going to appear, like a rash or something. And so I've been staring at the mirror, just waiting, and nothing's happened. So I figure I'm probably not really ugly, or I'd have noticed it, but that means I'm not really pretty either, because I'd have noticed that too. So I guess that means I'm absolutely plain, you know? Exactly average. I guess that's okay.

Joseph Weingartner:

Inducing an agnosia means simulating a specific brain lesion. We do this with a programmable pharmaceutical called neurostat; you can think of it as a highly selective anesthetic, one whose activation and targeting are all under dynamic control. We activate or deactivate the neurostat by transmitting signals through a helmet the patient puts on. The helmet also provides somatic positioning information so the neurostat molecules can triangulate their location. This lets us activate only the neurostat in a specific section of brain tissue, and keep the nerve impulses there below a specified threshold.

Neurostat was originally developed for controlling seizures in epileptics and for relief of chronic pain; it lets us treat even severe cases of these conditions without the side-effects caused by drugs that affect the entire nervous system. Later on, different neurostat protocols were developed as treatments for obsessive-compulsive disorder, addictive behavior, and various other disorders. At the same time, neurostat became incredibly valuable as a research tool for studying brain physiology.

One way neurologists have traditionally studied specialization of brain function is to observe the deficits that result from various lesions. Obviously, this technique is limited

because the lesions caused by injury or disease often affect multiple functional areas. By contrast, neurostat can be activated in the tiniest portion of the brain, in effect simulating a lesion so localized that it would never occur naturally. And when you deactivate the neurostat, the "lesion" disappears and brain function returns to normal.

In this way neurologists were able to induce a wide variety of agnosias. The one most relevant here is prosopagnosia, the inability to recognize people by their faces. A prosopagnosic can't recognize friends or family members unless they say something; he can't even identify his own face in a photograph. It's not a cognitive or perceptual problem; prosopagnosics can identify people by their hairstyle, clothing, perfume, even the way they walk. The deficit is restricted purely to faces.

Prosopagnosia has always been the most dramatic indication that our brains have a special "circuit" devoted to the visual processing of faces; we look at faces in a different way than we look at anything else. And recognizing someone's face is just one of the face-processing tasks we do; there are also related circuits devoted to identifying facial expressions, and even detecting changes in the direction of another person's gaze.

One of the interesting things about prosopagnosics is that while they can't recognize a face, they still have an opinion as to whether it's attractive or not. When asked to sort photos of faces in order of attractiveness, prosopagnosics sorted the photos in pretty much the same way as anyone else. Experiments using neurostat allowed researchers to identify the neurological circuit responsible for perceiving beauty in faces, and thus essentially invent calliagnosia.

Maria deSouza:

SEE has had extra neurostat programming helmets set up in the Student Health Office, and made arrangements so they can offer calliagnosia to anyone who wants it. You don't even have to make an appointment, you can just walk in. We're encouraging all the students to try it, at least for a day, to see what it's like. At first it seems a little odd, not seeing anyone as either good-looking or ugly, but over time you realize how positively it affects your interactions with other people.

A lot of people worry that calli might make them asexual or something, but actually physical beauty is only a small part of what makes a person attractive. No matter what a person looks like, it's much more important how the person acts; what he says and how he says it, his behavior and body language. And how does he react to you? For me, one of the things that attracts me to a guy is if he seems interested in me. It's like a feedback loop; you notice him looking at you, then he sees you looking at him, and things snowball from there. Calli doesn't change that. Plus there's that whole pheromone chemistry going on too; obviously calli doesn't affect that.

Another worry that people have is that calli will make everyone's face look the same, but that's not true either. A person's face always reflects their personality, and if anything, calli makes that clearer. You know that saying, that after a certain age, you're

responsible for your face? With calli, you really appreciate how true that is. Some faces just look really bland, especially young, conventionally pretty ones. Without their physical beauty, those faces are just boring. But faces that are full of personality look as good as they ever did, maybe even better. It's like you're seeing something more essential about them.

Some people also ask about enforcement. We don't plan on doing anything like that. It's true, there's software that's pretty good at guessing if a person has calli or not, by analyzing eye gaze patterns. But it requires a lot of data, and the campus security cams don't zoom in close enough. Everyone would have to wear personal cams, and share the data. It's possible, but that's not what we're after. We think that once people try calli, they'll see the benefits themselves.

Tamera Lyons: Check it out, I'm pretty!

What a day. When I woke up this morning I immediately went to the mirror; it was like I was a little kid on Christmas or something. But still, nothing; my face still looked plain. Later on I even (laughs) I tried to catch myself by surprise, by sneaking up on a mirror, but that didn't work. So I was kind of disappointed, and feeling just, you know, resigned to my fate.

But then this afternoon, I went out with my roommate Ina and a couple other girls from the dorm. I hadn't told anyone that I'd gotten my calli turned off, because I wanted to get used to it first. So we went to this snack bar on the other side of campus, one I hadn't been to before. We were sitting at this table, talking, and I was looking around, just seeing what people looked like without calli. And I saw this girl looking at me, and I thought, "She's really pretty." And then, (laughs) this'll sound really stupid, then I realized that this wall in the snack bar was a mirror, and I was looking at myself!

I can't describe it, I felt this incredible sense of relief. I just couldn't stop smiling! Ina asked me what I was so happy about, and I just shook my head. I went to the bathroom so I could stare at myself in the mirror for a bit.

So it's been a good day. I really like the way I look! It's been a good day.

Jeff Winthrop, third-year student, speaking at a student debate:
Of course it's wrong to judge people by their appearance, but this "blindness" isn't the answer. Education is.

Calli takes away the good as well as the bad. It doesn't just work when there's a possibility of discrimination, it keeps you from recognizing beauty altogether. There are plenty of times when looking at an attractive face doesn't hurt anyone. Calli won't let you make those distinctions, but education will.

And I know someone will say, what about when the technology gets better? Maybe one day they'll be able to insert an expert system into your brain, one that goes, "Is this an appropriate situation to apprehend beauty? If so, enjoy it; else, ignore it." Would that be okay? Would that be the "assisted maturity" you hear people talking about?

No, it wouldn't. That wouldn't be maturity; it'd be letting an expert system make your decisions for you. Maturity means seeing the differences, but realizing they don't matter. There's no technological shortcut.

Adesh Singh, third-year student, speaking at a student debate:

No one's talking about letting an expert system make your decisions. What makes calli ideal is precisely that it's such a minimal change. Calli doesn't decide for you; it doesn't prevent you from doing anything. And as for maturity, you demonstrate maturity by choosing calli in the first place.

Everyone knows physical beauty has nothing to do with merit; that's what education's accomplished. But even with the best intentions in the world, people haven't stopped practicing lookism. We try to be impartial, we try not to let a person's appearance affect us, but we can't suppress our autonomic responses, and anyone who claims they can is engaged in wishful thinking. Ask yourself: Don't you react differently when you meet an attractive person and when you meet an unattractive one?

Every study on this issue turns up the same results: looks help people get ahead. We can't help but think of good-looking people as more competent, more honest, more deserving than others. None of it's true, but their looks still give us that impression.

Calli doesn't blind you to anything; beauty is what blinds you. Calli lets you see.

Tamera Lyons:

So, I've been looking at good-looking guys around campus. It's fun; weird, but fun. Like, I was in the cafeteria the other day, and I saw this guy a couple tables away, I didn't know his name, but I kept turning to look at him. I can't describe anything specific about his face, but it just seemed much more noticeable than other people's. It was like his face was a magnet, and my eyes were compass needles being pulled toward it.

And after I looked at him for a while, I found it really easy to imagine that he was a nice guy! I didn't know anything about him, I couldn't even hear what he was talking about, but I wanted to get to know him. It was kind of odd, but definitely not in a bad way.

From a broadcast of EduNews, on the American College Network: In the latest on the Pembleton University calliagnosia initiative: EduNews has received evidence that public-relations firm Wyatt/Hayes paid four Pembleton students to dissuade classmates from voting for the initiative, without having them register their affiliations. Evidence includes an internal memo from Wyatt/Hayes, proposing that "good-looking students with high reputation ratings" be sought, and records of payments from the agency to Pembleton students.

The files were sent by the SemioTech Warriors, a culture-jamming group responsible for numerous acts of media vandalism.

When contacted about this story, Wyatt/Hayes issued a statement decrying this violation of their internal computer systems.

Jeff Winthrop:

Yes, it's true, Wyatt/Hayes paid me, but it wasn't an endorsement deal; they never told me what to say. They just made it possible for me to devote more time to the anti-calli campaign, which is what I would've done anyway if I hadn't needed to make money tutoring. All I've been doing is expressing my honest opinion: I think calli's a bad idea.

A couple of people in the anti-calli campaign have asked that I not speak publicly about the issue anymore, because they think it'd hurt the cause. I'm sorry they feel that way, because this is just an ad hominem attack. If you thought my arguments made sense before, this shouldn't change anything. But I realize that some people can't make those distinctions, and I'll do what's best for the cause.

Maria deSouza:

Those students really should have registered their affiliations; we all know people who are walking endorsements. But now, whenever someone criticizes the initiative, people ask them if they're being paid. The backlash is definitely hurting the anticalli campaign. I consider it a compliment that someone is taking enough interest in the initiative to hire a PRfirm. We've always hoped that its passing might influence people at other schools, and this means that corporations are thinking the same thing.

We've invited the president of the National Calliagnosia Association to speak on campus. Before we weren't sure if we wanted to bring the national group in, because they have a different emphasis than we do; they're more focused on the media uses of beauty, while here at SEE we're more interested in the social equality issue. But given the way students reacted to what Wyatt/Hayes did, it's clear that the media manipulation issue has the power to get us where we need to go. Our best shot at getting the initiative passed is to take advantage of the anger against advertisers. The social equality will follow afterwards.

From the speech given at Pembleton by Walter Lambert, president of the National Calliagnosia Association:

Think of cocaine. In its natural form, as coca leaves, it's appealing, but not to an extent that it usually becomes a problem. But refine it, purify it, and you get a compound that hits your pleasure receptors with an unnatural intensity. That's when it becomes addictive.

Beauty has undergone a similar process, thanks to advertisers. Evolution gave us a circuit that responds to good looks— call it the pleasure receptor for our visual cortex— and in our natural environment, it was useful to have. But take a person with one-in-a-million skin and bone structure, add professional makeup and retouching, and you're no longer looking at beauty in its natural form. You've got pharmaceutical-grade beauty, the cocaine of good looks.

Biologists call this "supernormal stimulus;" show a mother bird a giant plastic egg, and she'll incubate it instead of her own real eggs. Madison Avenue has saturated our environment with this kind of stimuli, this visual drug. Our beauty receptors receive more stimulation than they were evolved to handle; they're getting more in one day than our ancestors' did in their entire lives. And the result is that beauty is slowly ruining our lives.

How? The way any drug becomes a problem: by interfering with our relationships with other people. We become dissatisfied with the way ordinary people look because they can't compare to supermodels. Two-dimensional images are bad enough, but now with spex, advertisers can put a supermodel right in front of you, making eye contact. Software companies offer goddesses who'll remind you of your appointments. We've all heard about men who prefer virtual girlfriends over actual ones, but they're not the only ones who've been affected. The more time any of us spend with gorgeous digital apparitions around, the more our relationships with real human beings are going to suffer.

We can't avoid these images and still live in the modern world. And that means we can't kick this habit, because beauty is a drug you can't abstain from unless you literally keep your eyes closed all the time.

Until now. Now you can get another set of eyelids, one that blocks out this drug, but still lets you see. And that's calliagnosia. Some people call it excessive, but I call it just enough. Technology is being used to manipulate us through our emotional reactions, so it's only fair that we use it to protect ourselves too.

Right now you have an opportunity to make an enormous impact. The Pembleton student body has always been at the vanguard of every progressive movement; what you decide here will set an example for students across the country. By passing this initiative, by adopting calliagnosia, you'll be sending a message to advertisers that young people are no longer willing to be manipulated.

From a broadcast of EduNews:

Following NCA president Walter Lambert's speech, polls show that 54% of Pembleton students support the calliagnosia initiative. Polls across the country show that an average of 28% of students would support a similar initiative at their school, an increase of 8% in the past month.

Tamera Lyons:

I thought he went overboard with that cocaine analogy. Do you know anyone who steals stuff and sells it so he can get his fix of advertising?

But I guess he has a point about how good-looking people are in commercials versus in real life. It's not that they look better than people in real life, but they look good in a different way.

Like, I was at the campus store the other day, and I needed to check my email, and when I put on my spex I saw this poster running a commercial. It was for some shampoo, Jouissance I think. I'd seen it before, but it was different without calli. The model was so— I couldn't take my eyes off her. I don't mean I felt the same as that time I saw the good-looking guy in the cafeteria; it wasn't like I wanted to get to know her. It was more like... watching a sunset, or a fireworks display.

I just stood there and watched the commercial like five times, just so I could look at her some more. I didn't think a human being could look so, you know, spectacular.

But it's not like I'm going to quit talking to people so I can watch commercials through my spex all the time. Watching them is very intense, but it's a totally different experience than looking at a real person. And it's not even like I immediately want to go out and buy everything they're selling, either. I'm not even really paying attention to the products. I just think they're amazing to watch.

Maria deSouza:

If I'd met Tamera earlier, I might have tried to persuade her not to get her calli turned off. I doubt I would've succeeded; she seems pretty firm about her decision. Even so, she's a great example of the benefits of calli. You can't help but notice it when you talk to her. For example, at one point I was saying how lucky she was, and she said, "Because I'm beautiful?" And she was being totally sincere! Like she was talking about her height. Can you imagine a woman without calli saying that?

Tamera is completely unself-conscious about her looks; she's not vain or insecure, and she can describe herself as beautiful without embarrassment. I gather that she's very pretty, and with a lot of women who look like that, I can see something in their manner, a hint of showoffishness. Tamera doesn't have that. Or else they display false modesty, which is also easy to tell, but Tamera doesn't do that either, because she truly is modest. There's no way she could be like that if she hadn't been raised with calli. I just hope she stays that way.

Annika Lindstrom, second-year student:

I think this calli thing is a terrible idea. I like it when guys notice me, and I'd be really disappointed if they stopped.

I think this whole thing is just a way for people who, honestly, aren't very good-looking, to try and make themselves feel better. And the only way they can do that is to punish people who have what they don't. And that's just unfair.

Who wouldn't want to be pretty if they could? Ask anyone, ask the people behind this, and I bet you they'd all say yes. Okay, sure, being pretty means that you'll be hassled by jerks sometimes. There are always jerks, but that's part of life. If those scientists could come up with some way to turn off the jerk circuit in guys' brains, I'd be all in favor of that.

Jolene Carter, third-year student:

I'm voting for the initiative, because I think it'd be a relief if everyone had calli.

People are nice to me because of how I look, and part of me likes that, but part of me feels guilty because I haven't done anything to deserve it. And sure, it's nice to have men pay attention to me, but it can be hard to make a real connection with someone. Whenever I like a guy, I always wonder how much he's interested in me, versus how much he's interested in my looks. It can be hard to tell, because all relationships are wonderful at the beginning, you know? It's not until later that you find out whether you can really be comfortable with each other. It was like that with my last boyfriend. He wasn't happy with me if I didn't look fabulous, so I was never able to truly relax. But by the time I realized that, I'd already let myself get close to him, so that really hurt, finding out that he didn't see the real me.

And then there's how you feel around other women. I don't think most women like it, but you're always comparing how you look relative to everyone else. Sometimes I feel like I'm in a competition, and I don't want to be.

I thought about getting calli once, but it didn't seem like it would help unless everyone else did too; getting it all by myself wouldn't change the way others treat me. But if everyone on campus had calli, I'd be glad to get it.

Tamera Lyons:

I was showing my roommate Ina this album of pictures from high school, and we get to all these pictures of me and Garrett, my ex. So Ina wants to know all about him, and so I tell her. I'm telling her how we were together all of senior year, and how much I loved him, and wanted us to stay together, but he wanted to be free to date when he went to college. And then she's like, "You mean he broke up with you?"

It took me a while before I could get her to tell me what was up; she made me promise twice not to get mad. Eventually she said Garrett isn't exactly good-looking. I was thinking he must be average-looking, because he didn't really look that different after I got my calli turned off. But Ina said he was definitely below average.

She found pictures of a couple other guys who she thought looked like him, and with them I could see how they're not good-looking. Their faces just look goofy. Then I took another look at Garrett's picture, and I guess he's got some of the same features, but on him they look cute. To me, anyway.

I guess it's true what they say: love is a little bit like calli. When you love someone, you don't really see what they look like. I don't see Garrett the way others do, because I still have feelings for him.

Ina said she couldn't believe someone who looked like him would break up with someone who looked like me. She said that in a school without calli, he probably wouldn't have been able to get a date with me. Like, we wouldn't be in the same league.

That's weird to think about. When Garrett and I were going out, I always thought we were meant to be together. I don't mean that I believe in destiny, but I just thought there was something really right about the two of us. So the idea that we could've both been in the same school, but not gotten together because we didn't have calli, feels strange. And I know that Ina can't be sure of that. But I can't be sure she's wrong, either.

And maybe that means I should be glad I had calli, because it let me and Garrett get together. I don't know about that.

From a broadcast of EduNews:

Netsites for a dozen calliagnosia student organizations around the country were brought down today in a coordinated denial-of-service attack. Although no one claimed responsibility, some suggest the perpetrators are retaliating for last month's incident in which the American Association of Cosmetic Surgeons' net-site was replaced by a calliagnosia site.

Meanwhile, the SemioTech Warriors announced the release of their new "Dermatology" computer virus. This virus has begun infecting video servers around the world, altering broadcasts so that faces and bodies exhibit conditions such as acne and varicose veins.

Warren Davidson, first-year student:

I thought about trying calli before, when I was in high school, but I never knew how to bring it up with my parents. So when they started offering it here, I figured I'd give it a try. (shrugs) It's okay.

Actually, it's better than okay. (pause) I've always hated how I look. For a while in high school I couldn't stand the sight of myself in a mirror. But with calli, I don't mind as much. I know I look the same to other people, but that doesn't seem as big a deal as it used to. I feel better just by not being reminded that some people are so much better-looking than others. Like, for instance: I was helping this girl in the library with a problem on her calculus homework, and afterwards I realized that she's someone I'd thought was really pretty. Normally I would have been really nervous around her, but with calli, she wasn't so hard to talk to.

Maybe she thinks I look like a freak, I don't know, but the thing was, when I was talking to her I didn't think I looked like a freak. Before I got calli, I think I was just too self-conscious, and that just made things worse. Now I'm more relaxed.

It's not like I suddenly feel all wonderful about myself or anything, and I'm sure for other people calli wouldn't help them at all, but for me, calli makes me not feel as bad as I used to. And that's worth something.

Alex Bibescu, professor of religious studies at Pembleton:

Some people have been quick to dismiss the whole calliagnosia debate as superficial, an argument over makeup or who can and can't get a date. But if you actually look at it, you'll see it's much deeper than that. It reflects a very old ambivalence about the body, one that's been part of Western civilization since ancient times.

You see, the foundations of our culture were laid in classical Greece, where physical beauty and the body were celebrated. But our culture is also thoroughly permeated by the monotheistic tradition, which devalues the body in favor of the soul. These old conflicting impulses are rearing their heads again, this time in the calliagnosia debate.

I suspect that most calli supporters consider themselves to be modern, secular liberals, and wouldn't admit to being influenced by monotheism in any way. But take a look at who else advocates calliagnosia: conservative religious groups. There are communities of all three major monotheistic faiths— Jewish, Christian, and Muslim— who've begun using calli to make their young members more resistant to the charms of outsiders. This commonality is no coincidence. The liberal calli supporters may not use language like "resisting the temptations of the flesh," but in their own way, they're following the same tradition of deprecating the physical.

Really, the only calli supporters who can credibly claim they're not influenced by monotheism are the NeoMind Buddhists. They're a sect who see calliagnosia as a step toward enlightened thought, because it eliminates one's perception of illusory distinctions. But the NeoMind sect is open to broad use of neurostat as an aid to meditation, which is a radical stance of an entirely different sort. I doubt you'll find many modern liberals or conservative monotheists sympathetic to that!

So you see, this debate isn't just about commercials and cosmetics, it's about determining what's the appropriate relationship between the mind and the body. Are we more fully realized when we minimize the physical part of our nature? And that, you have to agree, is a profound question.

Joseph Weingartner:

After calliagnosia was discovered, some researchers wondered if it might be possible to create an analogous condition that rendered the subject blind to race or ethnicity. They've made a number of attempts— impairing various levels of category discrimination in tandem with face recognition, that sort of thing— but the resulting deficits were always unsatisfactory. Usually the test subjects would simply be unable to

distinguish similar-looking individuals. One test actually produced a benign variant of Fregoli syndrome, causing the subject to mistake every person he met for a family member. Unfortunately, treating everyone like a brother isn't desirable in so literal a sense.

When neurostat treatments for problems like compulsive behavior entered widespread use, a lot of people thought that "mind programming" was finally here. People asked their doctors if they could get the same sexual tastes as their spouses. Media pundits worried about the possibility of programming loyalty to a government or corporation, or belief in an ideology or religion.

The fact is, we have no access to the contents of anyone's thoughts. We can shape broad aspects of personality, we can make changes consistent with the natural specialization of the brain, but these are extremely coarse-grained adjustments. There's no neural pathway that specifically handles resentment toward immigrants, any more than there's one for Marxist doctrine or foot fetishism. If we ever get true mind programming, we'll be able to create "race blindness," but until then, education is our best hope.

Tamera Lyons:

I had an interesting class today. In History of Ideas, we've got this T.A., he's named Anton, and he was saying how a lot of words we use to describe an attractive person used to be words for magic. Like the word "charm" originally meant a magic spell, and the word "glamour" did, too. And it's just blatant with words like "enchanting" and "spellbinding." And when he said that, I thought, yeah, that's what it's like: seeing a really good-looking person is like having a magic spell cast over you.

And Anton was saying how one of the primary uses of magic was to create love and desire in someone. And that makes total sense, too, when you think about those words "charm" and "glamour." Because seeing beauty feels like love. You feel like you've got a crush on a really good-looking person, just by looking at them.

And I've been thinking that maybe there's a way I can get back together with Garrett. Because if Garrett didn't have calli, maybe he'd fall in love with me again. Remember how I said before that maybe calli was what let us get together? Well, maybe calli is actually what's keeping us apart now. Maybe Garrett would want to get back with me if he saw what I really looked like.

Garrett turned eighteen during the summer, but he never got his calli turned off because he didn't think it was a big deal. He goes to Northrop now. So I called him up, just as a friend, and when we were talking about stuff, I asked him what he thought about the calli initiative here at Pembleton. He said he didn't see what all the fuss was about, and then I told him how much I liked not having calli anymore, and said he ought to try it, so he could judge both sides. He said that made sense. I didn't make a big deal out of it, but I was stoked.

Daniel Taglia, professor of comparative literature at Pembleton:

The student initiative doesn't apply to faculty, but obviously if it passes there'll be pressure on the faculty to adopt calliagnosia as well. So I don't consider it premature for me to say that I'm adamantly opposed to it.

This is just the latest example of political correctness run amok. The people advocating calli are well-intentioned, but what they're doing is infantilizing us. The very notion that beauty is something we need to be protected from is insulting. Next thing you know, a student organization will insist we all adopt music agnosia, so we don't feel bad about ourselves when we hear gifted singers or musicians.

When you watch Olympic athletes in competition, does your self-esteem plummet? Of course not. On the contrary, you feel wonder and admiration; you're inspired that such exceptional individuals exist. So why can't we feel the same way about beauty? Feminism would have us to apologize for having that reaction. It wants to replace aesthetics with politics, and to the extent it's succeeded, it's impoverished us.

Being in the presence of a world-class beauty can be as thrilling as listening to a world-class soprano. Gifted individuals aren't the only ones who benefit from their gifts; we all do. Or, I should say, we all can. Depriving ourselves of that opportunity would be a crime.

Commercial paid for by People for Ethical Nanomedicine:

Voiceover: Have your friends been telling you that calli is cool, that it's the smart thing to do? Then maybe you should talk to people who grew up with calli.

"After I got my calli turned off, I recoiled the first time I met an unattractive person. I knew it was silly, but I just couldn't help myself. Calli didn't help make me mature, it kept me from becoming mature. I had to relearn how to interact with people."

"I went to school to be a graphic artist. I worked day and night, but I never got anywhere with it. My teacher said I didn't have the eye for it, that calli had stunted me aesthetically. There's no way I can get back what I've lost."

"Having calli was like having my parents inside my head, censoring my thoughts. Now that I've had it turned off, I realize just what kind of abuse I'd been living with."

Voiceover: If the people who grew up with calliagnosia don't recommend it, shouldn't that tell you something?

They didn't have a choice, but you do. Brain damage is never a good idea, no matter what your friends say.

Maria deSouza:

We'd never heard of the People for Ethical Nanomedicine, so we did some research on them. It took some digging, but it turns out it's not a grassroots organization at all, it's an industry PRfront. A bunch of cosmetics companies got together recently and created it. We haven't been able to contact the people who appear in the commercial, so we don't know how much, if any, of what they said was true. Even if they were being honest, they certainly aren't typical; most people who get their calli turned off feel fine about it. And there are definitely graphic artists who grew up with calli.

It kind of reminds me of an ad I saw a while back, put out by a modeling agency when the calli movement was just getting started. It was just a picture of a supermodel's face, with a caption: "If you no longer saw her as beautiful, whose loss would it be? Hers, or yours?" This new campaign has the same message, basically saying, "you'll be sorry," but instead of taking that cocky attitude, it has more of a concerned-warning tone. This is classic PR: hide behind a nice-sounding name, and create the impression of a third party looking out for the consumer's interests.

Tamera Lyons:

I thought that commercial was totally idiotic. It's not like I'm in favor of the initiative— I don't want people to vote for it— but people shouldn't vote against it for the wrong reason. Growing up with calli isn't crippling. There's no reason for anyone to feel sorry for me or anything. I'm dealing with it fine. And that's why I think people ought to vote against the initiative: because seeing beauty is fine.

Anyway, I talked to Garrett again. He said he'd just gotten his calli turned off. He said it seemed cool so far, although it was kind of weird, and I told him I felt the same way when I got mine disabled. I suppose it's kind of funny, how I was acting like an old pro, even though I've only had mine off for a few weeks.

Joseph Weingartner:

One of the first questions researchers asked about calliagnosia was whether it has any "spillover," that is, whether it affects your appreciation of beauty outside of faces. For the most part, the answer seems to be "no." Calliagnosics seem to enjoy looking at the same things other people do. That said, we can't rule out the possibility of side effects.

As an example, consider the spillover that's observed in prosopagnosics. One prosopagnosic who was a dairy farmer found he could no longer recognize his cows individually. Another found it harder to distinguish models of cars, if you can imagine that. These cases suggest that we sometimes use our face-recognition module for tasks other than strict face recognition. We may not think something looks like a face—a car, for example—but at a neurological level we're treating it as if it were a face.

There may be a similar spillover among calliagnosics, but since calliagnosia is subtler than prosopagnosia, any spillover is harder to measure. The role of fashion in cars' appearances, for example, is vastly greater than its role in faces', and there's little consensus about which cars are most attractive. There may be a calliagnosic out there who doesn't enjoy looking at certain cars as much as he otherwise would, but he hasn't come forward to complain.

Then there's the role our beauty-recognition module plays in our aesthetic reaction to symmetry. We appreciate symmetry in a wide range of settings— painting, sculpture,

graphic design— but at the same time we also appreciate asymmetry. There are a lot of factors that contribute to our reaction to art, and not much consensus about when a particular example is successful.

It might be interesting to see if calliagnosia communities produce fewer truly talented visual artists, but given how few such individuals arise in the general population, it's difficult to do a statistically meaningful study. The only thing we know for certain is that calliagnosics report a more muted response to some portraits, but that's not a side effect per se; portrait paintings derive at least some of their impact from the facial appearance of the subject.

Of course, any effect is too much for some people. This is the reason given by some parents for not wanting calliagnosia for their children: they want their children to be able to appreciate the Mona Lisa, and perhaps create its successor.

Marc Esposito, fourth-year student at Waterston College:

That Pembleton thing sounds totally crazed. I could see doing it like a setup for some prank. You know, as in, you'd fix this guy up with a girl, and tell him she's an absolute babe, but actually you've fixed him up with a dog, and he can't tell so he believes you. That'd be kind of funny, actually.

But I sure as hell would never get this calli thing. I want to date good-looking girls. Why would I want something that'd make me lower my standards? Okay, sure, some nights all the babes have been taken, and you have to choose from the leftovers. But that's why there's beer, right? Doesn't mean I want to wear beer goggles all the time.

Tamera Lyons:

So Garrett and I were talking on the phone again last night, and I asked him if he wanted to switch to video so we could see each other. And he said okay, so we did.

I was casual about it, but I had actually spent a lot of time getting ready. Ina's teaching me to put on makeup, but I'm not very good at it yet, so I got that phone software that makes it look like you're wearing makeup. I set it for just a little bit, and I think it made a real difference in how I looked. Maybe it was overkill, I don't know how much Garrett could tell, but I just wanted to be sure I looked as good as possible.

As soon as we switched to video, I could see him react. It was like his eyes got wider. He was like, "You look really great," and I was like, "Thanks." Then he got shy, and made some joke about the way he looked, but I told him I liked the way he looked.

We talked for a while on video, and all the time I was really conscious of him looking at me. That felt good. I got a feeling that he was thinking he might want us to get back together again, but maybe I was just imagining it.

Maybe next time we talk I'll suggest he could come visit me for a weekend, or I could go visit him at Northrop. That'd be really cool. Though I'd have to be sure I could do my own makeup before that.

I know there's no guarantee that he'll want to get back together. Getting my calli turned off didn't make me love him less, so maybe it won't make him love me any more. I'm hoping, though.

Cathy Minami, third-year student:

Anyone who says the calli movement is good for women is spreading the propaganda of all oppressors: the claim that subjugation is actually protection. Calli supporters want to demonize those women who possess beauty. Beauty can provide just as much pleasure for those who have it as for those who perceive it, but the calli movement makes women feel guilty about taking pleasure in their appearance. It's yet another patriarchal strategy for suppressing female sexuality, and once again, too many women have bought into it.

Of course beauty has been used as a tool of oppression, but eliminating beauty is not the answer; you can't liberate people by narrowing the scope of their experiences. That's positively Orwellian. What's needed is a woman-centered concept of beauty, one that lets all women feel good about themselves instead of making most of them feel bad.

Lawrence Sutton, fourth-year student:

I totally knew what Walter Lambert was talking about in his speech. I wouldn't have phrased it the way he did, but I've felt the same way for a while now. I got calli a couple years ago, long before this initiative came up, because I wanted to be able to concentrate on more important things.

I don't mean I only think about schoolwork; I've got a girlfriend, and we have a good relationship. That hasn't changed. What's changed is how I interact with advertising. Before, every time I used to walk past a magazine stand or see a commercial, I could feel my attention being drawn a little bit. It was like they were trying to arouse me against my will. I don't necessarily mean a sexual kind of arousal, but they were trying to appeal to me on a visceral level. And I would automatically resist, and go back to whatever I was doing before. But it was a distraction, and resisting those distractions took energy that I could have been using elsewhere.

But now with calli, I don't feel that pull. Calli freed me from that distraction, it gave me that energy back. So I'm totally in favor of it.

Lori Harber, third-year student at Maxwell College:

Calli is for wusses. My attitude is, fight back. Go radical ugly. That's what the beautiful people need to see.

I got my nose taken off about this time last year. It's a bigger deal than it sounds, surgery-wise; to be healthy and stuff, you have to move some of the hairs further in to catch dust. And the bone you see (taps it with a fingernail) isn't real, it's ceramic. Having your real bone exposed is a big infection risk.

I like it when I freak people out; sometimes I actually ruin someone's appetite when they're eating. But freaking people out, that's not what it's about. It's about how ugly can beat beautiful at its own game. I get more looks walking down the street than a beautiful woman. You see me standing next to a video model, who you going to notice more? Me, that's who. You won't want to, but you will.

Tamera Lyons:

Garrett and I were talking again last night, and we got to talking about, you know, if either of us had been going out with someone else. And I was casual about it, I said that I had hung out with some guys, but nothing major.

So I asked him the same. He was kind of embarrassed about it, but eventually he said that he was finding it harder to, like, really become friendly with girls in college, harder than he expected. And now he's thinking it's because of the way he looks.

I just said, "No way," but I didn't really know what to say. Part of me was glad that Garrett isn't seeing someone else yet, and part of me felt bad for him, and part of me was just surprised. I mean, he's smart, he's funny, he's a great guy, and I'm not just saying that because I went out with him. He was popular in high school.

But then I remembered what Ina said about me and Garrett. I guess being smart and funny doesn't mean you're in the same league as someone, you have to be equally good-looking too. And if Garrett's been talking to girls who are pretty, maybe they don't feel like he's in their league.

I didn't make a big deal out of it when we were talking, because I don't think he wanted to talk about it a lot. But afterwards, I was thinking that if we decide to do a visit, I should definitely go out to Northrop to see him instead of him coming here. Obviously, I'm hoping something'll happen between us, but also, I thought, maybe if the other people at his school see us together, he might feel better. Because I know sometimes that works: if you're hanging out with a cool person, you feel cool, and other people think you're cool. Not that I'm super cool, but I guess people like how I look, so I thought it might help.

Ellen Hutchinson, professor of sociology at Pembleton:

I admire the students who are putting forth this initiative. Their idealism heartens me, but I have mixed feelings about their goal.

Like everyone else my age, I've had to come to terms with the effects time has had on my appearance. It wasn't an easy thing to get used to, but I've reached the point where I'm content with the way I look. Although I can't deny that I'm curious to see what a

calli-only community would be like; maybe there a woman my age wouldn't become invisible when a young woman entered the room.

But would I have wanted to adopt calli when I was young? I don't know. I'm sure it would've spared me some of the distress I felt about growing older. But I liked the way I looked when I was young. I wouldn't have wanted to give that up. I'm not sure if, as I grew older, there was ever a point when the benefits would have outweighed the costs for me.

And these students, they might never even lose the beauty of youth. With the gene therapies coming out now, they'll probably look young for decades, maybe even their entire lives. They might never have to make the adjustments I did, in which case adopting calli wouldn't even save them from pain later on. So the idea that they might voluntarily give up one of the pleasures of youth is almost galling. Sometimes I want to shake them and say, "No! Don't you realize what you have?"

I've always liked young people's willingness to fight for their beliefs. That's one reason I've never really believed in the cliché that youth is wasted on the young. But this initiative would bring the cliché closer to reality, and I would hate for that to be the case.

Joseph Weingartner:

I've tried calliagnosia for a day; I've tried a wide variety of agnosias for limited periods. Most neurologists do, so we can better understand these conditions and empathize with our patients. But I couldn't adopt calliagnosia on a long-term basis, if for no other reason than that I see patients.

There's a slight interaction between calliagnosia and the ability to gauge a person's health visually. It certainly doesn't make you blind to things like a person's skin tone, and a calliagnosic can recognize symptoms of illness just like anyone else does; this is something that general cognition handles perfectly well. But physicians need to be sensitive to very subtle cues when evaluating a patient; sometimes you use your intuition when making a diagnosis, and calliagnosia would act as a handicap in such situations.

Of course, I'd be disingenuous if I claimed that professional requirements were the only thing keeping me from adopting calliagnosia. The more relevant question is, would I choose calliagnosia if I did nothing but lab research and never dealt with patients? And to that, my answer is no. Like many other people, I enjoy seeing a pretty face, but I consider myself mature enough to not let that affect my judgment.

Tamera Lyons:

I can't believe it, Garrett got his calli turned back on.

We were talking on the phone last night, just ordinary stuff, and I ask him if he wants to switch to video. And he's like, "Okay," so we do. And then I realize he's not looking at

me the same way he was before. So I ask him if everything's okay with him, and that's when he tells me about getting calli again.

He said he did it because he wasn't happy about the way he looked. I asked him if someone had said something about it, because he should ignore them, but he said it wasn't that. He just didn't like how he felt when he saw himself in a mirror. So I was like, "What are you talking about, you look cute." I tried to get him to give it another chance, saying stuff like, he should spend more time without calli before making any decisions. Garrett said he'd think about it, but I don't know what he's going to do.

Anyway, afterwards, I was thinking about what I'd said to him. Did I tell him that because I don't like calli, or because I wanted him to see how I looked? I mean, of course I liked the way he looked at me, and I was hoping it would lead somewhere, but it's not as if I'm being inconsistent, is it? If I'd always been in favor of calli, but made an exception when it came to Garrett, that'd be different. But I'm against calli, so it's not like that.

Oh, who am I kidding? I wanted Garrett to get his calli turned off for my own benefit, not because I'm anti-calli. And it's not even that I'm anti-calli, so much, as I am against calli being a requirement. I don't want anyone else deciding calli's right for me: not my parents, not a student organization. But if someone decides they want calli themselves, that's fine, whatever. So I should let Garrett decide for himself, I know that.

It's just frustrating. I mean, I had this whole plan figured out, with Garrett finding me irresistible, and realizing what a mistake he'd made. So I'm disappointed, that's all.

From Maria deSouza's speech the day before the election:

We've reached a point where we can begin to adjust our minds. The question is, when is it appropriate for us to do so? We shouldn't automatically accept that natural is better, nor should we automatically presume that we can improve on nature. It's up to us to decide which qualities we value, and what's the best way to achieve those.

I say that physical beauty is something we no longer need. Calli doesn't mean that you'll never see anyone as beautiful. When you see a smile that's genuine, you'll see beauty. When you see an act of courage or generosity, you'll see beauty. Most of all, when you look at someone you love, you'll see beauty. All calli does is keep you from being distracted by surfaces. True beauty is what you see with the eyes of love, and that's something that nothing can obscure.

From the speech broadcast by Rebecca Boyer, spokesperson for People for Ethical Nanomedicine, the day before the election:

You might be able to create a pure calli society in an artificial setting, but in the real world, you're never going to get a hundred percent compliance. And that is calli's weakness. Calli works fine if everybody has it, but if even one person doesn't, that person will take advantage of everyone else.

There'll always be people who don't get calli; you know that. Just think about what those people could do. A manager could promote attractive employees and demote ugly ones, but you won't even notice. A teacher could reward attractive students and punish ugly ones, but you won't be able to tell. All the discrimination you hate could be taking place, without you even realizing.

Of course, it's possible those things won't happen. But if people could always be trusted to do what's right, no one would have suggested calli in the first place. In fact, the people prone to such behavior are liable to do it even more once there's no chance of their getting caught.

If you're outraged by that sort of lookism, how can you afford to get calli? You're precisely the type of person who's needed to blow the whistle on that behavior, but if you've got calli, you won't be able to recognize it.

If you want to fight discrimination, keep your eyes open.

From a broadcast of EduNews:

The Pembleton University calliagnosia initiative was defeated by a vote of sixty-four percent to thirty-six percent.

Polls indicated a majority favoring the initiative until days before the election. Many students who previously supported the initiative say they reconsidered after seeing the speech given by Rebecca Boyer of the People for Ethical Nanomedicine. This despite an earlier revelation that PEN was established by cosmetics companies to oppose the calliagnosia movement.

Maria deSouza:

Of course it's disappointing, but we originally thought of the initiative as a long shot. That period when the majority supported it was something of a fluke, so I can't be too disappointed about people changing their minds. The important thing is that people everywhere are talking about the value of appearances, and more of them are thinking about calli seriously.

And we're not stopping; in fact, the next few years will be a very exciting time. A spex manufacturer just demonstrated some new technology that could change everything. They've figured out a way to fit somatic positioning beacons in a pair of spex, custom-calibrated for a single person. That means no more helmet, no more office visit needed to reprogram your neurostat; you can just put on your spex and do it yourself. That means you'll be able to turn your calli on or off, any time you want.

That means we won't have the problem of people feeling that they have to give up beauty altogether. Instead, we can promote the idea that beauty is appropriate in some situations and not in others. For example, people could keep calli enabled when they're working, but disable it when they're among friends. I think people recognize that calli offers benefits, and will choose it on at least a part-time basis.

I'd say the ultimate goal is for calli to be considered the proper way to behave in polite society. People can always disable their calli in private, but the default for public interaction would be freedom from lookism. Appreciating beauty would become a consensual interaction, something you do only when both parties, the beholder and the beheld, agree to it.

From a broadcast of EduNews:

In the latest on the Pembleton calliagnosia initiative, EduNews has learned that a new form of digital manipulation was used on the broadcast of PEN spokesperson Rebecca Boyer's speech. EduNews has received files from the SemioTech Warriors that contain what appear to be two recorded versions of the speech: an original— acquired from the Wyatt/Hayes computers— and the broadcast version. The files also include the SemioTech Warriors' analysis of the differences between the two versions.

The discrepancies are primarily enhancements to Ms. Boyer's voice intonation, facial expressions, and body language. Viewers who watch the original version rate Ms. Boyer's performance as good, while those who watch the edited version rate her performance as excellent, describing her as extraordinarily dynamic and persuasive. The SemioTech Warriors conclude that Wyatt/Hayes has developed new software capable of fine-tuning paralinguistic cues in order to maximize the emotional response evoked in viewers. This dramatically increases the effectiveness of recorded presentations, especially when viewed through spex, and its use in the PEN broadcast is likely what caused many supporters of the calliagnosia initiative to change their votes.

Walter Lambert, president of the National Calliagnosia Association:

In my entire career, I've met only a couple people who have the kind of charisma they gave Ms. Boyer in that speech. People like that radiate a kind of reality-distortion field that lets them convince you of almost anything. You feel moved by their very presence, you're ready to open your wallet or agree to whatever they ask. It's not until later that you remember all the objections you had, but by then, often as not, it's too late. And I'm truly frightened by the prospect of corporations being able to generate that effect with software.

What this is, is another kind of supernormal stimuli, like flawless beauty but even more dangerous. We had a defense against beauty, and Wyatt/Hayes has escalated things to the next level. And protecting ourselves from this type of persuasion is going to be a hell of a lot harder.

There is a type of tonal agnosia, or aprosodia, that makes you unable to hear voice intonation; all you hear are the words, not the delivery. There's also an agnosia that prevents you from recognizing facial expressions. Adopting the two of these would protect you from this type of manipulation, because you'd have to judge a speech purely on its content; its delivery would be invisible to you. But I can't recommend these agnosias. The result is nothing like calli. If you can't hear tone of voice or read

someone's expression, your ability to interact with others is crippled. It'd be a kind of high-functioning autism. A few NCA members are adopting both agnosias, as a form of protest, but no one expects many people will follow their example.

So that means that once this software gets into widespread use, we're going to be facing extraordinarily persuasive pitches from all sides: commercials, press releases, evangelists. We'll hear the most stirring speeches given by a politician or general in decades. Even activists and culture jammers will use it, just to keep up with the establishment. Once the range of this software gets wide enough, even the movies will use it, too: an actor's own ability won't matter, because everyone's performance will be uncanny.

The same thing'll happen as happened with beauty: our environment will become saturated with this supernormal stimuli, and it'll affect our interaction with real people. When every speaker on a broadcast has the presence of a Winston Churchill or a Martin Luther King, we'll begin to regard ordinary people, with their average use of paralinguistic cues, as bland and unpersuasive. We'll become dissatisfied with the people we interact with in real life, because they won't be as engaging as the projections we see through our spex.

I just hope those spex for reprogramming neurostat hit the market soon. Then maybe we can encourage people to adopt the stronger agnosias just when they're watching video. That may be the only way for us to preserve authentic human interaction: if we save our emotional responses for real life.

Tamera Lyons:

I know how this is going to sound, but... well, I'm thinking about getting my calli turned back on.

In a way, it's because of that PEN video. I don't mean I'm getting calli just because makeup companies don't want people to and I'm angry at them. That's not it. But it's hard to explain.

I am angry at them, because they used a trick to manipulate people; they weren't playing fair. But what it made me realize was, I was doing the same kind of thing to Garrett. Or I wanted to, anyway. I was trying to use my looks to win him back. And in a way that's not playing fair, either.

I don't mean that I'm as bad as the advertisers are! I love Garrett, and they just want to make money. But remember when I was talking about beauty as a kind of magic spell? It gives you an advantage, and I think it's very easy to misuse something like that. And what calli does is make a person immune to that sort of spell. So I figure I shouldn't mind if Garrett would rather be immune, because I shouldn't be trying to gain an advantage in the first place. If I get him back, I want it to be by playing fair, by him loving me for myself.

I know, just because he got his calli turned back on doesn't mean that I have to. I've really been enjoying seeing what faces look like. But if Garrett's going to be immune, I feel like I should be too. So we're even, you know? And if we do get back together, maybe we'll get those new spex they're talking about. Then we can turn off our calli when we're by ourselves, just the two of us.

And I guess calli makes sense for other reasons, too. Those makeup companies and everyone else, they're just trying to create needs in you that you wouldn't feel if they were playing fair, and I don't like that. If I'm going to be dazzled watching a commercial, it'll be when I'm in the mood, not whenever they spring it on me. Although I'm not going to get those other agnosias, like that tonal one, not yet anyway. Maybe once those new spex come out.

This doesn't mean I agree with my parents' having me grow up with calli. I still think they were wrong; they thought getting rid of beauty would help make a utopia, and I don't believe that at all. Beauty isn't the problem, it's how some people are misusing it that's the problem. And that's what calli's good for; it lets you guard against that. I don't know, maybe this wasn't a problem back in my parents' day. But it's something we have to deal with now.