

Of Physicists and Fen: a fanzine

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Abstract

A young physicist and fan, known to her friends as Åka, reports from a physics conference. Observations of the similarities between this conference and a science fiction convention are made, and the complementarity of research and fanac in life is pointed out.

Introduction

It's a late morning the week after midsummer when I park my bike under the elms behind the Uppsala University main building. Cold and windy, not exactly the summer weather we wish for in our precious short summer months. Not that weather matters much when you hide all day in the dark Aula Magna to listen to important research results.

This is going to be a long day, and I decided to sleep a bit longer and arrive after the first coffee break. I have been unusually tired ever since I got pregnant, and I don't want to push myself too hard. Most of the talks today are outside my field of interest anyway.

At the registration desk in the impressive grey marble foyer I get my badge, my temporary computer account (not that I will need that one as a resident student) and my red shoulder bag with note pad, pen and tourist information. Above the high doors to the Aula I read the famous inscription: "Tänka fritt är stort, tänka rätt är större". (It's a quote of the 18'th century philosopher Thomas Thorild, and could be translated to something like: "Free thinking is great. Correct thinking is greater." Very annoying to many today.) I quietly find myself a seat close to one of the pillars at the back of the Aula and take a look at the rest of the audience. Here are hundreds of physicists, many of them lit up by the spooky bluish light of their laptop screens. It looks like a typical conference audience.

The speaker looks very small under the huge chandelier and the colourful and heavily gilded arches above the stage. It is darksome and the peculiar acoustics gives a churchlike reverb to the voice. I soon feel very sleepy on the soft seat. What is she talking about? Higgs particles, supersymmetry and other physics beyond the standard model. I take some notes in an effort to stay awake and focus, this is actually interesting.

This afternoon I will be on duty at the stage, handling the microphones and forms for the questions after each talk. It's not so bad to be on the staff, to be allowed to participate in a large conference like this and meet the cream of the particle community without paying a fee or having to submit a paper. At the same time I feel distanced, outside. I'm not really a part of this on equal terms with the others.

I reflect over this feeling and wonder for the zillionth time if I will ever feel like a real, grown up physicist. Should I pursue an academical career at all? Is this really my thing? I will soon finish my analysis, write up my thesis and become a PhD. By then I will also be a mother. Then what? What do I want to do with the rest of my life?

Conference

He knew that very few of the dozens of papers to be delivered to the I.A.U. would be of the slightest interest to him, even if he could understand them. Like a delegate to any scientific congress, he would attend the lectures that looked promising, and spend the rest of the time talking with fellow enthusiasts, or simply sight-seeing.

Arthur C. Clarke [1]

A scientific conference is fundamentally the same kind of event as a science fiction convention. Only different. Here I am at Lepton-Photon, a particle physics conference. It's less than two weeks since I attended ConCeive in Göteborg, this year's Swecon (the annual large Swedish convention), and as I balance my coffee mug through the foyer in a break I can't help reflecting over the similarities.

We all wear badges with our names. At Swecon someone told me that he felt embarrassed to stare at my badge when I wore it on the chest and had a low-necked shirt, so now I've placed it closer to my shoulder. I'm so short that it must be good to place it as high as possible anyway.

There is something like a dealer's corner, with several tables full of books and catalogues of more books and periodicals. Participants in the conference can get a special discount. I have a look, some of the things are really interesting. I just have the feeling that I will not take the time to read a book on field theories or on the physicists in the Soviet Union under Stalin. No, I'm not buying anything. Not now.

Upstairs, on the gallery outside the faculty rooms, is the art exhibition. In a scientific conference the posters on display can be quite as colourful as the unicorns and spaceships we see at the other type of event, but some of them are just dense printouts of articles with lots of tiny text and symbols. At the poster session in the afternoon you can meet the creators of the posters, and ask intricate questions about diagrams and numbers.

There is even a fanzine corner. It is a medium sized lecture room with hundreds of papers arranged on tables for those who care to browse. These are the contributions that people submit when they intend to attend the conference. Not many look at them, they are available on the web for those who are really interested.

People gather at the bar, just like members of an sf con. At the kind of sf convention I'm used to the bar is the heart of the event and good beer is important. What we find here is not much of a convention bar — it's actually not really a bar at all. You can get coffee, tea, fruit, cookies and nothing else. But it is all included in the conference fee! Also, the bar closes as soon as the bell rings for the start of the next session. There is only one programme track, and you're supposed to attend it or discreetly sneak out for touristic activities on your own. Breaks, poster sessions and social events are for meeting and talking to people.

There are, of course, some major differences between the two cons I'm comparing. One of them is that Lepton-Photon is partly arranged by a conference company. It gives a very professional attitude to the registration desk, but they don't do anything else and don't seem to know anything about the important things — like banquet tickets for the staff slaves like me. The real concom is of course the people from my department who, just like fans, take time from other things to plan and arrange.

Lepton-Photon runs much more smoothly than ConCeive, where there were all sorts of problems and chaos with planning and programming. In the end it was a success anyway, because of the nice atmosphere, great people and good bar. The guests were also important, Charles Stross and Erik Granström (the latter is a local fantasy author who is well known to Swedish gamers for his worldbuilding in the classic *Drakar och Demoner*).

At this conference there are no guests of honour. Or maybe there are about 35 GoH:s, if you count all the invited speakers. The main star might be Francis Halzen, who gets to do the summary talk at the end, or Frank Wilczek, Nobel laureate who gives a public lecture: "The Universe is a Strange Place".

The first evening there is a reception, much like the parties at bigger sf conventions. It takes place in the faculty rooms upstairs in the University building, where professors and kings of earlier decades and centuries are watching us from their portraits. There is a bit of food, and wine for those who want. I have a glass of non-alcoholic wine. Not that it really tastes good, but it's more interesting than water and gives me a nice feeling of being provided for.

It's really crowded, and I experience the usual feeling of drowning among the people. I'm very short, and the world is full of tall men. After a while I make my way to a corner where I can breathe, and see something, and talk

to some people from my collaboration. People are complaining about the cold weather, and someone asks me about Alfvén. Wasn't he from Uppsala? There is some confusion until we realise that there were two famous Alfvén: one who composed music and one who discovered plasma waves and got a Nobel prize.

Suddenly I'm very tired. Is this really fun? I wonder how small and lost I will feel at Interaction. It's my first Worldcon, and I certainly expect to be confused, overwhelmed and lost. I will probably enjoy myself also, but I think the experience will be very different from the small and cozy conventions I'm used to.

Interlude I

When I leave the building for lunch break I pass the model of AMANDA, the detector I'm working with. It is 18 rows of diodes in a glass case as high as a man, blinking happily in different colours like an American Christmas tree. Each dot of light represents a photodetector module that registered one or several photons in the ice at the South Pole, indicating that a muon passed by. It's not in real time, of course, but it's still real data being replayed.

Maybe I should go to the lab. The lunch break is long enough for me to have time to have a look at my simulations. Days are passing in this conference without much real work being done.

On the other hand, I would not be able to do much in less than an hour anyway, and the brain usually needs time to switch from doing one thing to doing another. Just across the street is a good second-hand bookshop with lots of science fiction and other interesting things. I go there instead, and then home to get something to eat. Sensible, but I have this nagging feeling that I could be a better student, that I should work harder.

I don't know where the notion comes from, but there is a perpetual struggle in my mind against the idea that a Real Scientist has to be fanatically devoted to the research work. If I don't watch out I will inevitably start feeling inadequate and unworthy because I don't love physics above everything else and don't have great ideas or feel enthusiastic all the time. I like physics, but it's not my whole world.

I guess I'm kind of disappointed that graduate school didn't turn me into a workaholic. I wouldn't mind working with something that I'm completely in love with. At the same time: how many people do? Only a few very lucky ones.

Life is so nice, and there are so many things to see and do and so many books to read. I have to remind myself that there are other physicists who manage to be fans at the same time. Yes, and there are even those who combine science with writing science fiction. I too can allow myself to have a life.

Boring session

Jan wanted to hear the first or the day's lectures, which, it was rumored, would completely demolish the current theory of the formation of the planets.

Perhaps it did, but Jan was little the wiser when he left after the interval.

Arthur C. Clarke [1]

It's impossible. Noone can keep interest and concentration up through a whole conference. There are some people with the supernatural power of being able to listen to an obscure talk about a subject unknown to them, and to take note of what seems to be the important points, remember them and ask questions afterwards. I admire this, but I have to say that I seldom envy them. My brain wants to filter information and take in only things that are connected to something I know and can relate to, and this is often very useful.

This talk is really awful. Not even someone with insight in the particular subfield can follow this. 70 slides pass by our eyes in 30 minutes! And all of them full of tables and diagrams, densely stuffed with information. The only way to get something out of it must be to note where there was an interesting plot, and then look it up on the conference web page afterwards. All slides are posted on the web during the talk, so people can access the information.

People have all sorts of strategies to survive the boring parts. The guy in front of me is writing e-mail, and the young German I spoke to in the break is proofreading his thesis. My mind is drifting, I'm daydreaming about writing and about life after the dissertation. After a while I take out pen and paper and start making an outline of a fanzine.

Not much compares to making fanzines. It's my favourite hobby and pastime, not to say my passion. I like *making* things, and fanzines are not only for myself but something others can enjoy as well. A fanzine is also a physical object that I can give away and share with people — which is one of the reasons that *Folk och fans i landet Annien* is only available in dead tree form. Then there is the joy (and pain!) of writing, the way my thoughts are sharpened and focussed when I turn them in to written words.

In fact, I think much of what I like doing is related to thinking about things and then pass the information on to others. It motivates me, inspires me. You would think that I'm the born academic! Writing and teaching, that's what we are supposed to do at the university, isn't it?

Unfortunately for me, this is not exactly a description of my daily work. I sincerely hope that I will have more of both in my future job, whatever that

might be. You have probably heard the phrase “publish or perish” — you have to turn out papers all the time to show that you are doing something and to have something to point at when you apply for funding. Well, it doesn’t work this way in experimental high energy physics. This is a field where we use the world’s largest machines to investigate the smallest things known, which means that we work in huge collaborations with hundreds (nowadays even thousands) of members spending years or decades on careful preparations before there are any results to publish. When there is finally a paper you are just one name in a really long author list, and it might not be easy to point to your own contribution.

This is why I haven’t written any papers. The sad truth is also that I haven’t done any regular teaching since spring 2003. Looking back, I can’t help thinking that I could have done better if I had known what was missing. I could have tried to plan my studies in a way that included writing some internal reports and perhaps presenting things at a couple of conferences. This way I might have kept my motivation level — and high — instead of the roller coaster ride it has been. It would have looked good on the CV as well.

But there is no use thinking of what could have been. I have learned a lot as a graduate student, and I’m going to finish my thesis without too much pain and suffering. In the meantime I have also done a lot of fanac, including many fanzine issues yielding a good amount of egoboo. At least I know that I can write.

Maybe it’s not scientific articles I would like to write, but popular science. Many scientists take an interest in popularising their subject, and some are really good at it. I have a secret dream (not so secret anymore) of doing something like an updated version of *The Science in Science Fiction* [2], a book that made a great impression on me when I was about 14. Working with something like that would be great fun. Of course, I would need a job that could give me money at the same time, which makes the matter more complicated. I have no illusions about the possibility of making money from writing.

It’s not impossible. I could learn to write about science without resorting to the boring and detached journalistic style, or becoming sensational and silly. I have made some experiments with fanzine articles about matter and particles and I think they turned out well, although I could probably do even better with some more work. It’s only frustrating that my readers never enjoy my serious articles (whether they are on books or on science) as much as my lighter fanwriting.

My fanzines are usually dominated by my own writing, about widely varying things. The regular fanzine *Folk och fans i landet Annien* is meant to contain a lot of material on fans and fandom, but also articles on anything I find interesting. Like books. The twentieth issue (since 1998) was printed for ConCeive. Sometimes I want to do something different and turn out

a strange oneshot. All in all I must have made about 30 issues of various fanzines. (I also write in other people's fanzines, and do reviews for a couple of genre magazines.)

Now I want to do one of those odd things. Small, personal, probably eventually available on the web. I want to write something about physicists and fans, about my observations of these two peoples. It would also be a presentation of myself, and perhaps a glimpse of Swedish fandom. It would be nice to bring something to Interaction, if only to make contact with other faneds. Yes, a good idea. I just have to do this!

Interlude II

Summer! Yes, the weather is better! In the evening I take my bike and go on a ride. I follow the river almost all the way to the lake, and then go back through a scenic part of the countryside. It's not long after midsummer, the sun is still high at eight and it's warm. The air is full of the scent of elderflowers and wild roses. I have no sorrows in the world.

In a few days it will be the first tuesday of July, and the next installment of the monthly pub meetings. This spring we passed meeting number 100 and celebrated with a small fanzine. Many of us are students and gone over summer, but there will certainly be a few fans gathering. If I do any more fanwriting in English I might tell you more about us and what's going on in Upsalafandom and in Sverifandom.

Social events

The Lepton-Photon programme also includes lighter events, not directly related to physics. One evening we are invited to the cathedral, close to the university building, to listen to the choir La Cappella. It's a really good concert, with old and new folk songs and songs inspired by folk music from different parts of the world. The only annoying thing is that the audience is in such a hurry to start clapping before the last note has time to die out.

Physicists are not known for being very sophisticated. We have very varied backgrounds and the atmosphere is generally relaxed and informal. This is often nice, but I notice a clash of cultures when it's time for the banquet on Monday night. It's a banquet at the castle, and there is some talk among the local students about what to wear. Certainly you have to dress up for a dinner at the castle?

Our experienced secretary at the department advises the first year PhD student not to take the evening gown. "You know what physicists are like. Half of them will come in jeans and the shirt they have worn for two days." Here in Uppsala students get a very thorough training in how to behave

at better dinner parties (because of our wonderful and annoying, beautiful and tedious time-honoured traditions...) but you shouldn't expect that academics from other parts of the world do things in the same way.

I'm not surprised that many start eating without waiting for the welcoming address, or that there is confusion about the napkins when some take the one to their left and some the one to their right, or that there is cutlery noise from people who continue eating during speeches. It's a nice dinner anyway. Great food and good company.

The head of my department wants to put some local colour to the evening, and asks all Swedes to join him in a drinking song for the first schnapps. We sing a lot at dinners, and there are songs that everyone knows. It actually gets us a round of applause.

There is highbrow entertainment as well, two singers from some opera academy and a string quartet. The speeches are short and mostly good, except for a poor guy who fails miserably to say something intelligible about physics and music. Too much wine and snaps, probably. Some merciful colleagues shorten his suffering by means of enthusiastic rounds of applause.

When I walk home it's close to midnight, but not really dark. It has been nice, but I'm dead tired. One more conference day, then things will be back to normal. I need to get somewhere with my thesis work. And where's the time for fanac?

Summary and outlook

We have been introduced to Åka, the PhD student and the faned, and seen a glimpse of her world and thoughts. Now she hopes to make contact with other faneds outside Scandinavia. This fanzine will be made available on the web after Interaction. Letters of comment are welcome: Anna.Davour@tsl.uu.se.

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Most important of all is my husband Andreas, who supports me through inspiration and despair, in physics as well as in fandom.

References

- [1] Arthur C. Clarke, *Childhoods End*, 1953
- [2] Peter Nicholls (ed), *The Science in Science Fiction*, 1982