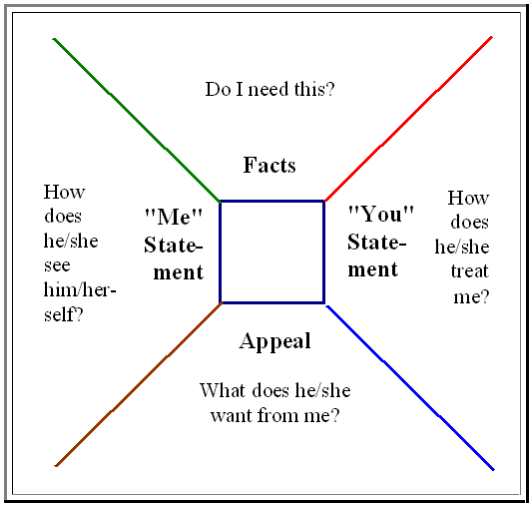
Good ideas do not convince most people because they are good:
You have to convince them!

2.1.2 Some General Points

- The success of a presentation- however measured - will always depend on two factors:
  - *The factual content*
    (here we discuss only scientific, not political or sociological presentations, so we assume there *is* content)
  - *The packaging*
- Both factors are equally important in a first approximation! Remember: *Success = Content · Acceptance* and that means that for acceptance **= 0**, success will be **= 0**, too - even if you talk about the work that will get you the Noble prize.
- Now, as far as content goes, try to recall some presentations that you heard and found good. Most likely two conditions were met:
  - You *understood* what was being said. Even if you got lost on occasion, you always could follow the *red line* of the presentation.
  - You were not put off by the *packaging* - you sort of *liked* the speaker. The way he/she presented the stuff kept you willing to continue listening.
- The question is, how do *you* make sure that your audience feels that way about *your* presentation?
  - If you are not a fascinating person by definition (e.g. a Noble Prize Winner, or Brittney Spears teaching semiconductor physics), you have to appeal to your audience on a factual *and* emotional level.
  - Since scientific presentation are supposed to be *un*emotional in the conventional sense of the word, your emotional impact must come from the way you speak, you move, you look at your audience, you formulate your sentences, and so on.

Four Aspects of Communications

- Look at the diagram below. It shows 2 pairs of complementary or juxtaposed ways of the possible reception of a presentation. Now start thinking!



- The recipient of your presentation has a completely free choice of what aspects he/she emphasizes for himself/herself. If there are many recipients, changes are that they will walk away and they all have heard quite different things if you ask them about the presentation a few days later. The message received by each individual differs from that of his neighbour, and *all* receptions may differ from what was sent, or from *what you think* you sent.

- There is nothing you can do about this - except to make sure that on top of varying memories they all (or at least most of them) have the same recollection of just a few *essentials*.

- And if you rack your own memory of some presentation you heard in the past, your recollection will always be along two totally separate lines
  - You may remember something about the *topic*:
    ("...it had something to do with Si chips...")
  - You remember something about the *presentation*:
    ("...he made a lot of jokes...", "..he was barely understandable..", ."... he forgot to remove his bicycle clips from his pants...", "...I forgot what it was all about, but it was very interesting", "... was that the talk where everybody fell asleep?".
- Try it! If you can remember any presentation without remembering something on this "emotional" level, you are actually dead and were replaced by an alien robot!

Noise in Communication

- As you (should) know from communication theory, any communication channel may be disturbed by noise or other aberrations. Now, you are sending on *two* channels simultaneously - the factual one *and* the emotional one.
  - And face it: Even if the *factual* channel is noise-free, noise on the emotional channel influences the reception on the factual channel - there is heavy cross-talk!
- Lets look at some of the reasons for *noise*:
  - *Incongruent signals:*
    Factual and emotional (or spoken and unspoken) messages differ. A trivial example: If you discuss equation **X**, but point at equation **Y**, your audience gets confused.
  - *Unfavourable relations to audience*
    Being factually correct may be emotionally wrong. Saying repeatedly ..."as you all should know from High school..." may be factually correct, but the people will start to hate you after the third time and won't develop a positive attitude towards your message.
  - *Being hard to follow*
    This can happen in quite different ways. If you say "as is immediately apparent, the solution to this (incredibly long and complex) differential equation is $\mathbf{c = \nu \cdot \lambda}$ .. ", you loose your audience (it is either insulted or thinks about why something is immediately apparent that is not), but you also loose it if you start solving your equation for a long time (the audience meanwhile forgets what the solution is good for).
  - *Biased Recipients*
    They shouldn't exist in science, but then, most of us are human. If you to explain to Prof. **X** and his crew, why their pet theory is all wrong, your audience will be biased and receive what you say heavily filtered. The same thing happens, just with signs reversed, if your stuff supports his pet theory. Students have accused their Professor (me) of being against alternative energies, because he pointed out that there are only so much **kWh** that you may get from any solar cell in this solar system. The message received was completely different from what was sent because a bias developed early in the presentation.
  - *Blocking*
    In the extreme form of the above issue, the recipient will simply no longer listen or turn everything around.

Body Language

- **Noise Sources on the Emotional Channel**
- There are a few "classical" sources of noise on the emotional channel, that may heavily interfere with the signals on the factual channel:
  - *No eye contact*.
    If you talk to the blackboard, to the overhead projector or to someone in outer space, you are going to loose your audience. *That is not easy to avoid*. Sometimes it is helpful if you pick a few *contact persons* (not too close up) in the audience, to whom you talk by keeping eye contact (for only a few seconds each!).
  - *Nervously running back and forth all the time*.
  - *Standing stiffly in one place all the time*.
  - *Lots of gesticulation*.
  - *No gesticulation*.
    If you secretly hope that your hands will disappear because you don't know what to do with them, your audience will notice (*very difficult problem!*). In scientific talks there are simple tricks: Writing on foils or on the blackboard, keeping a pointer in your hand (but then you must use it sensibly).

- *Playing with the pointer*.
- *Fumbling around a lot with your notes*.
- *Worst of all: reading everything from your notes* (while looking at your notes)

How to Appear Secure

- It doesn't matter if you *feel* secure and confident, it only matters that your audience gets that impression. However, it is a lot easier to convey that impression if you actually *are* secure and confident. But there are tricks:
  - *Stand securely*.
    Legs slightly spread, erect and face your audience. (if you're a female, don't wear high heels if it is not a fashion event).
  - *Control your gestures*.
    (but forget that if you are a beginner). Still, the idea is to move your arms only above the belt line and outside of the chest area.
  - *Be loud, be slow and make pauses*.
    A loud voice (not screaming) is a signal of security. Machine gun speech patterns are only in character if it is one of your trade marks (beginners have no trade marks).
  - *Controlled position changes*.
    Walk calmly to the overhead projector, blackboard etc. If you are extremely controlled, make a little stop on your way to wherever, and continue your presentation with a few remarks. That requires that you start to walk *before* the issue that demands the walk comes up!
  - Calmly face your "contact persons" eye to eye - but no longer than **3** seconds. Have at least three contact persons or segments of the audience between which you change your eye contact.
- But don't forget: If you actually try to remember and do all this on your *first few* presentations, you will definitely forget what you wanted to talk about (all this needs practice).
  - *If you neglect the signals on the factual channel, zero negative interference on the emotional channel cannot have any positive impact!*