## My correspondence with A. Student on 'Rational conventions (to be) adopted'

- The following explanatory correspondence has been anonymised. And the pseudonym has been been inspired by Edwin A. Abbott's famous 'Flatland. A romance of many dimensions', published under the pseudonym A. Square in London by Seeley, 1884. Unabridged, corrected text: New York: Dover, 1992. Thrift editions. Text at Project Gutenberg: http://promo.net/pg.
- The mails, in reverse order, are essentially original with only minor corrections, few personal remarks being deleted and and up-dates being added.

From: Michael SchmiechenSent: Monday, October 5, 2015 10:51 AMTo: A. StudentSubject: Rational conventions (to be) adopted

Dear young friend,

with many thanks for your kind mail I wish you much success for your thesis. Do not hesitate to contact me again. As you have seen, our correspondence has been very fruitfull for me.

Yours, Michael.

From: A. Student Sent: Saturday, October 3, 2015 10:49 PM To: Prof. Michael Schmiechen Subject: Rational conventions (to be) adopted

**Dear Professor** 

Receiving and reading your emails is always a pleasure and gives me an opportunity to think on the way my journey to studying ship powering trials has evolved, and I am very happy to learn that you feel accomplished following many hard years of work. You have certainly earned your respect amongst scholars and practitioners and as I have reiterated in the past, I believe your work will get what its due one fine day.

I also thank you for the leaflet you have attached and have immediately printed a copy to make me remember the numerous exchange of emails we have had over these last few weeks. I feel privileged to have had the opportunity to share my ideas with you.

I am also grateful for enlightening me on the problems relating to Model Basins. We will certainly keep in touch and will keep you updated on the developments of my studies, should I not bother you too much. I wish you well and please keep in touch.

Best regards, sincerely your young friend.

From: Michael Schmiechen To: A. Student Subject: Rational conventions (to be) adopted Date: Sat, 3 Oct 2015 19:19:28 +0200

Dear Young friend,

here comes the result of my exercise, not really much new for you.

On the occasion of yesterdays meeting of the STG Committee on Ship Hydrodynamics at Kiel I have in absentia published and distributed the pamphlet on 'Trustworthy results of ship powering trials and monitoring' on my website www.m-schmiechen.de . You find it in the 'News flash' under 'Happy end of very long story'. And for ready reference I attach the file here as well.

As the two leading papers are of considerable interest to the ITTC Specialists Committee on the Performance of Ships in Service, it occured to me, that, on invitation, I might attend one of the meetings, provided it is scheduled not too far from Berlin, so that I can afford the trip. This would permit indepth explanations and discussions of the essentials.

One of these essentials is a fundamental fact documented in Volume 3 of my METEOR-Festschrift. Contrary to the STAimo procedure adopted by ITTC, ISO and IMO, requiring the propulsive efficiency at the trial conditions to be pulled as joker out-of the sleeve, the rational approach permits to identify the propulsive efficiency solely and simply from the measured data, without requiring any prior data!

I feel quite relaxed now and started spreading the gospel. We enjoy perfect early fall weather, Altweiber-Sommer (Old Wives Summer), not yet Indian Summer.

Yours, Michael.

From: Michael SchmiechenSent: Monday, September 28, 2015 5:07 PMTo: A. StudentSubject: Rational conventions (to be) adopted

Dear young friend,

yes, the model basins have standards. They are well aware of the standards ISO 900x and had the first version of the ITTC Quality Manual published in 1999! But there are more than 100 different (!) basins, each with its own

'proven' routines concerning testing models and providing 'reliable' predictions for the trials.

Thus the project to come up with a 'coherent' (!) document accepted by all of them is ongoing. But in my eyes work is seriously impeded by frequent changes in membership of the Technical Committees and lack of professional expertise, naval architects not being trained for this type of work.

Personally I have been member of the Symbols and Terminology Group for five terms, fifteen years, and produced the new structure of the ITTC Symbols and Terminology List. It took me the whole summer 1992 and [2017.1029: the meanwhile historical document] has been adopted by the full Conference at San Francisco in 1993; VWS Mitteilungen Heft 57.

Many thanks for your explanations of acronyms.

With kind kind regards yours, Michael.

From: A. StudentSent: Sunday, September 27, 2015 10:59 PMTo: Prof. Michael SchmiechenSubject: Rational conventions (to be) adopted

**Dear Professor** 

We have also been having lovely weather recently. Thanks for your recent email as it is now clear what you meant. In many instances, rational is being taken over by politics!! Politics and politicians are further being exacerbated by social media.

Reference to my last question, I was enquiring whether model test basins have standards, they are bound to follow. Such standards could have been defined by the European Union (for Europe) or an international organization such as the IMO. As for acronyms used please find explanation below.

Thanks and regards your young friend.

From: Michael Schmiechen To: A. Student Subject: Rational conventions (to be) adopted Date: Sun, 27 Sep 2015 11:08:39 +0200

Good morning, young friend,

The crucial problem I mentioned concerned standards of maneuverability to be met. And the most recent example to stop research due to endangering the business of many 'people' is the STAimo procedure adopted by ITTC, ISO and IMO!

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And to repeat: At the ITTC in Copenhagen 2014 my work since 1980, of course known to many colleagues worldwide, has carefuly been excluded from discussion, which did in fact not take place. See my contributions on pages 85 thru 99 in Volume 3 of my METEOR-Festschrift.

Further down in your mail I do not understand, what type of lists you are looking for. And I definitely do not know any of the acronyms you mention. So I cannot answer your questions. This reminds me one of our visits at St. Peterburg. As usual people asked me for the way, but I did not understand their question. Else I could have told them!

Enyoying another sunny day yours, Michael.

From: A. StudentSent: Saturday, September 26, 2015 6:18 PMTo: Prof. Michael SchmiechenSubject: Rational conventions (to be) adopted

Dear Professor Schmiechen

I will rephrase accordingly then and thank for the updates. I do not however understand the concept of *'stop research concerning another crucial problem'*. Why? If that could solve the problem??? It goes against many other concepts in management/sociology, and other disciplines.

Anyway, wish you luck for your next symposium in October. On a separate note, knowing that you have spent most of your career at the Berlin Basin, do you know whether there is an approved list by the EU or IMO. ...

With thanks again for all your help, and with best regards your young friend.

From: Michael Schmiechen To: A. Student Subject: Rational conventions (to be) adopted Date: Sat, 26 Sep 2015 13:57:02 +0200

Dear young friend,

before we start into the sunny weekend here a short note.

After some deliberation I noticed, that it does not make much sense to incorporate my new note into the Introduction. This would require too much rephrasing and the clear message would be lost and diluted.

I thus decided to incorporate the note on the rational approach separately into the brochure I am preparing, right after the Introduction. Attached please find my draft, the second iteration, still subject to necessary corrections and additons.

Looking at the last, short paragraph you will notice the real problem. Nobody wants the door to manipulation shut! As a young man I have been advised at a meeting of a renowned research organisation to stop my research concerning another crucial problem.

The 'danger' of my work has even explicitly been stated! Yards would have to guarantee things, they cannot possibly guarantee. And here comes the Volkswagen desaster, not incredible, but incredibly stupid! In order to meet your promisses you have to have the possibility to manipulate the data, but in an intelligent fashion.

And I have publicly asked, how long owners and charterers are accepting to be 'cheated'?

Regards, Michael.

From: Michael SchmiechenSent: Thursday, September 24, 2015 6:39 PMTo: A. StudentSubject: Rational conventions (to be) adopted

Dear Young friend,

you are right! I shall of course drop the 'dark' end of the draft and any reference to our correspondence, which forced me accidentally at the right time, 'clare et distincte' to explain the essence of my approach! Thank you!

Back from a walk I had already started to replace empty phrases with substantial remarks and to streamline the whole draft.

As an instant-decision maker I 'do it now', in order to be free for the things I actually need and/or want to do.

Yours, Michael.

From: A. Student
Sent: Thursday, September 24, 2015 5:46 PM
To: Michael Schmiechen
Subject: RE: Rational conventions (to be) adopted-review

**Dear Professor** 

Thank you for clarifying current state. I would like to enquire however whether you plan to upload the text you have attached which makes reference to our exchange of emails.(including the last two paragraphs which remained unchanged from my first notes) This fact is important for me because while i was obviously going to make references where appropriate, as you may have observed in my draft i sent you, i would have to rephrase the part you have drafted as cannot just copy word by word.

Thanks and regards your young friend.

From: Michael SchmiechenSent: 24/09/2015 16:19To: A. StudentSubject: Rational conventions (to be) adopted

Dear Young friend,

many thanks for your response. This morning in a lake in Tiergarten, the large open park next to our home, we saw a tree cut down overnight by a beaver and his children!

During the walks, among others, many things related to our discussion came to my mind, which I shall try to jot down in an organised, not too emotional fashion.

Concerning my explanatory notes, I have started to add important facts and I attach the current state. Further I intend to incorporate the whole exposition into my 'Introduction' and to put that 'Introduction' onto my website, not only for my German colleagues. Accordingly I suggest, that you quote my explanations in detail with the correct reference.

This saves you from rephrasing and at the same time from being sued for plagiarism. Only yesterday I read an interesting paper highlighting many aspects of this problem. Among them professors publishing the results of their students and the latter being sued, when publishing their doctoral thesis! I think this does not at all apply in your case.

My concern is, that rephrasing tends to introduce more or less serious mistakes. And after decades of related experience with colleagues, ignorant of the simple facts of the theory of theories and its applications, but arrogant enough to judge my work, I finally want to put an end to this practice.

The proposal of Abkowitz is not only ridiculous, but historical, do not mention it at all. Incidentally Abkowitz prevented the presentation of my ideas at an Annual Meeting of SNAME. And I have in hand, I still wonder how it came there, the copy of my, now also historical draft with his ignorant notes.

Until further considerations and necessary corrections yours, Michael.

PS. Please note the I am not a native speaker, my English is not perfect and as I mentioned it is old-fashioned. During my schooldays seventy years ago to

split the infinitive has been a mistake, definitely bad style, now it is not only fashionable, but rather the standard.

From: A. StudentSent: Wednesday, September 23, 2015 11:51 PMTo: Prof. Michael SchmiechenSubject: Rational conventions (to be) adopted

Dear Professor Schmiechen

I thank you for your time and review and will take your advice not to get into too much detail. Your explanation is much clearer than I had imagined and have to confess that thanks to our correspondence, in addition to having learnt something more about rational conventions, I have also expanded my English vocabulary with terms such as axiomatic, intersubjectivity, devoid and a few more and I am grateful for your time, support and availability.

I thank you once again and hope to keep in touch.

Respectfully your young friend.

From: Michael Schmiechen To: A. Student Subject: Rational conventions (to be) adopted Date: Wed, 23 Sep 2015 16:42:54 +0200

Dear Young friend,

in great hurry I have glued all my remarks together. Do not go into details! But try to understand the 'whole'! My website abounds with explanatory notes on any level of abstraction.

Yours, Michael. **From:** Michael Schmiechen **Sent:** Wednesday, September 23, 2015 2:18 PM **To:** A. Student **Subject:** Rational conventions (to be) adopted

Dear Young friend,

before I start to read your draft, I stumbled over the title of the document.

As the title of our correspondence says and as I have pointed out explicitly, the essential innovation is not the application of systems identification, but the introduction coherent axiomatic conventions permitting coherently to identify the concepts introduced, 'slightly' different (!) from the traditional interpretations, from a single set of coherent data, to be obtained in a short test at service conditions without anybody noticing that such test is being performed, instead of relying on incoherent data of hull towing and propeller open water tests, impossible on full scale anyway, definitely impossible under service conditions.

My work to overcome all (!) deficiencies of the traditional approach started with my Schiffstechnik paper written at a summer weekend in 1980 and ended 2015 with Volume 3 of my METEOR-Festschrift, documenting the very happy end of the development, covered in every detail on my website.

In this spirit I shall now start to read your draft. Please feel free to use any of my notes!

Regards, Michael.

From: A. Student
Sent: Wednesday, September 23, 2015 1:47 AM
To: Prof. Michael Schmiechen
Subject: Rational conventions (to be) adopted

Dear Professor

I have attached the section of my literature review which discusses your methods for your kind review.

Thanks and regards your young friend.

From: Michael Schmiechen To: A. Student Subject: Rational conventions (to be) adopted Date: Tue, 22 Sep 2015 19:11:16 +0200

Young friend,

during long walks and training of my bodily muscles it occured to me, that my remark concerning the subsequent analysis of the quasi-steady data was rather too short.

The essential steps are the identification of the propulsive efficiency and of the parameters of the fundamental partial efficiencies.

Solving the nonlinear system of non-linear equations for those parameters by the method of conjugate gradients does in fact not require post-iteration as I have tested now. This was just too much, unnecessary perfection.

But I stress over and over again, that the analysis needs utmost care, cult of data! But this was and is also true for the traditional approch. Naval architects always needed slide rules of double lengths or even more. The reason for this requirement is the essentially differentiating nature of the analysis.

Michael.

From: Michael SchmiechenSent: Tuesday, September 22, 2015 2:03 PMTo: A. StudentSubject: Rational conventions (to be) adopted

Young friend,

here follow few quick additions.

My analysis of steady states is cleanly separated into two steps.

In the first step the propeller powering performance in the behind condition and the current are jointly identified at the prevailing sea state. Thus replacing the open water test!

In the second step the environmental conditions are identified, permitting to reduce the results to the nominal no wind and no waves condition. Thus replacing the resistance test!

In case of quasi-steady tests the subsequent analysis permits to identify all partial efficiencies and wake components.

Further, I missed to mention that my esteemed colleagues at model basins and ship yards did not tell their clients. But only recently clients have successfully been alerted by Dr. Wagner and are asking for 'rational' trials, providing not only reliable results and but saving them a lot of money at the same time.

Regards, Michael.

From: Michael SchmiechenSent: Tuesday, September 22, 2015 11:23 AMTo: A. StudentSubject: Rational conventions (to be) adopted

Dear Young friend

do not worry. I am perfectly fine and I (still) respond to all questions, as this helps me to clarify and to promote my ideas.

You are referring to my linear approximations in the narrow ranges of variations. This prevents me from systematic errors encountered, if 'simply' using averages. You will have noted, that I always 'correctly' obtain changes due to changes of the hull advance ratio, i. e. of the propeller loading.

I am absolutely interested in your understanding and quoting my method correctly. A colleague of mine, my 'lecto'r, Dr.-Ing. habil Klaus Wagner, just sent me one of his expositions for scrutiny. I offer you to do the same!

Although I am phrasing my sentences with utmost care, there is no way to avoid being misunderstood, as Sir Karl Popper noted in his 'Unended Quest'.

But be careful clearly to distinguish the cases of traditional, steady trials and and of rational, quasi-steady trials. In the latter case I am at first identifying and treating the steady states and only after that I treat the quasi-steady states. The interesting fact is that in the latter case you observe in an extremely short time many more steady states than in a whole day using the traditional runs back and forth. At leasr since 25 years this is known, but my esteemed colleagues carefully avoided to tell their students.

So much for the moment, yours, Michael.

From: A. StudentSent: Tuesday, September 22, 2015 1:21 AMTo: Prof. Michael SchmiechenSubject: Rational conventions (to be) adopted

**Dear Professor** 

I hope this email finds you well and that I am not over testing your patience in responding to my emails. I have spent a few more evenings in trying to understanding better your methods of quasi steady state measurements. Albeit going through your website more than a few times, I am still confused to what is related to subscripts 0 and 1 often referred to in many of your formulas.

Are these measurements taken at different time intervals (say at intervals of 10 seconds) and why do you use small letters ? I am still unwilling to give up into getting into some detail in explaining your method in my literature review. But as you may well appreciate, I need to be confident in quoting your formulas.

I thank you once again for your time and patience.

Wit best regards your young friend.

From: A. Student
Sent: Sunday, September 6, 2015 9:58 PM
To: Michael Schmiechen
Subject: Speed and power trials: System identification technique

Dear Prof Schmiechen

I apologise but I must have given the impression from my email that I conducted trials using your method while in fact, I used the ITTC/ISO method. I only heard of your method later.

What I meant was that I would be willing to countercheck your method once I have gone through your literature and feel confident I can objectively do it properly. But I want to finalize my thesis first as have to conclude by December.

Only then it would be fair to publish findings on your website or possibly do a paper. I thank you once again for your assistance and promise to keep in touch!

I thank you once again for your time.

Sincerely, your young friend.

From: Michael Schmiechen To: A. Student Subject: Speed and power trials: System identification technique Date: Sun, 6 Sep 2015 18:41:09 +0200

Dear young friend

re-reading my explanatory notes and your reply I noticed that you may have got something wrong.

The time taken for a quasi-steady test took two minutes at the model test of 1986 (!), while at the METEOR full scale tests of 1988 it took twenty minutes! At those tests I was extremely careful, maybe too careful, not to pick up effects due to hysteresis.

Further it occured to me, that our correspondence might be of interest to other colleagues a well. Thus I kindly ask your permission to publish it on my website and elsewhere.

With kind regards yours, Michael Schmiechen.

From: A. Student
Sent: Friday, September 4, 2015 4:37 PM
To: Michael Schmiechen
Subject: Speed and Power trials-System Identification technique

Dear Prof Schmiechen

Many Thanks for your prompt and kind reply. To be honest, I have come to hear of your method through reading the literature of Dr. Hasselaar from Marin who I became aware (through your detailed accounts) you have also become acquainted with at the recent ITTC conference. He hinted vaguely to your method and that of Prof Abkowitz during his PHD thesis which is available online, and I became intrigued and looked for your literature.

My studies involved conducting power sea trials using the ITTC/ISO method as only recently I came across your method. I am tempted to do the same trials using your method and will be a recommendation in my final comments especially if it only takes two minutes. I have conducted both Trust and torque measurements but used a load cell and conducted a bollard pull test to calibrate the trust (strain) gauges.

Regretfully many a time, great geniuses where only applauded for their masterpiece many years late in time such as Galileo Galilei, Mozart, Herman Melville (the author of Moby Dick) and many others and I humbly believe that your theories will follow the same faith. But who knows !!!

I thank you once again for your interest and will keep you updated on the developments.

Sincerely your young friend.

From: Michael Schmiechen To: A. Student Subject: Speed and power trials: System identification technique Date: Fri, 4 Sep 2015 14:11:45 +0200

Dear young colleague,

many thanks for your kind interest in my work on trials and monitoring of ship powering performance.

Before I care to dive into my archive to answer your question, I dare to ask you, who (the devil) told you to study my historical (!) work, in its infancy 1991, instead of looking on my website <u>www.m-schmiechen.de</u> for my most recent, mature work?

In particular I refer you to my 'Festschrift', published to celebrate the anniversary of my quasi-steady propulsion tests with METEOR in 1988. Since 2013 I have published three volumes, explicitly (!) demonstrating in every (!) detail, very rare these days (!), the state of my research and the power of my approach; the volumes to be found at the beginning of the website under 'News flash'.

While Volumes 1 and 2 are documenting the details of my analyses and very delicate comparisons of two sets of traditional, 'steady' trials, Volume 3 provides my final analysis of a quasi-steady model test of two minutes duration, the data of which have been instrumental in the development of various aspects of my approach over the past decades since 1986.

The results of that exercise provide the very (!) happy end of my intense work and publications on the problems, lasting for 35 years now, starting with the inaugural paper of 1980. The development, nearly completely covered on my website, has been 'consistently' ignored by my collegues at universities and model basins. Even at the 27th ITT at Copenhagen in 2014 my colleagues carefully avoided even to mention my work.

Instead they are still following 'the emperor in his new clothes', 'STAimo', essentially the conceptual framework of our great-grandfathers, now perpetuated by ITTC and by ISO in its standards 15016 and 19030 and made compulsory (!) by IMO regulation. In case you are not familiar with the tale of Hans Christian Andersen, please check the abstract of the plot in my Volume 2 on page 83. But in the meantime industrial clients are getting interested and asking for reliable (!) results my way.

Thus the community is being forced, finally to study and further develop my approach to meet current requests. And the academic community can no longer irresponsibly exclusively adhere to the CFD-monoculture, but has to care for adequate development and teaching of all the other branches of ship theory and its applications. At the beginning of the translation of a talk on the ANONYMA project I gave at a meeting of the pertinent STG committee two years ago you find all the neglected areas. I am attaching the ppt file, so you can also inspect my notes.

So much for now, as always (still) in a hurry, with kind regards to your supervisors yours, Michael Schmiechen.

PS. As a sufficiently intricate example I have published the rational theory of propulsion in the third, final volume of my opus magnum, a rational reconstruction of classical dynamics, [2017.10.29: in the meantime to be found on my website].

From: A. Student
Sent: Friday, September 4, 2015 12:49 AM
To: Michael Schmiechen
Subject: Speed and power trials: System identification technique

## Dear Professor Schmiechen

Hope this email finds you well. Firstly please allow me to introduce myself. I am student currently working for an MSc in Marine Engineering. I am in the process of completing my final thesis and have come across your innovative method for conducting speed and power trials.

I have gone through your report 1184/91 to try and understand your method used so as to be able to describe it as part of my literature review. But I have noticed that the graphs and diagrams you refer to in your literature from pages 73 to 79 are blank and was wondering whether you could indicate if these are available elsewhere.

I thank you in advance for your time and assistance.

Respectfully your young friend.