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Erika Ábrahám · Marcello Bonsangue
Einar Broch Johnsen (Eds.)

Theory and Practice of Formal Methods

Essays Dedicated to Frank de Boer on the Occasion of His 60th Birthday

Springer

Editors
Erika Ábrahám
RWTH Aachen University
Aachen
Germany

Marcello Bonsangue
Leiden University
Leiden
The Netherlands

Einar Broch Johnsen
University of Oslo
Oslo
Norway

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Frank de Boer

(Photo taken by Einar Broch Johnsen)

Preface

This festschrift celebrates the 60th anniversary of Professor Frank S. de Boer. Frank is a prominent member of the research community in formal methods and theoretical computer science. A brief look through his lengthy publication list reveals a broad area of interest and a versatile modus operandi compared with many of his colleagues: logic and constraint programming; deductive proof systems, soundness, and completeness; semantics, compositionality, and full abstraction; process algebra and decidability; multithreading and actor-based concurrency; agent programming, ontologies, and modal logic; real-time systems, timed automata, and schedulability; enterprise architectures, choreography, and coordination; testing and runtime monitoring; and cloud computing and service-level agreements. For a while, he also liked failures, especially in semantics, and optimistically concluded with the failure of failures. In fact, Frank has an opportunistic approach to research. Rather than seeing obstacles, he finds opportunities.

In the shadow of Frank's research achievements, there is the "deboerian myth." In this short preface, we will not dwell further on his scientific accomplishments. Instead, we seek to cement this myth. Not the man behind the myth, but the myth behind the man. It has been said that when Frank started his PhD in computer science, the world lost a skilled classical guitarist. Rumor has it that he was even playing professionally for a while. From his former hippie life as a guitar player, Frank has retained a relaxed attitude to life and a certain *joie de vivre* which he effectively combines with his research. Marjan Sirjani explains: "Frank is a philosopher, a logician, and a computer scientist. He has novel ideas in many diverse fields, from Hoare logic to timed actors to Java threads. Frank is fun and frustration! He may not be always politically correct, but he rarely offends people, as he is just who he is, he is just Frank. He is full of energy and he loves sunny days, for him it's a sin to work on a sunny day." Ernst-Rüdiger Olderog remembers working with Frank and Krzysztof Apt after Frank's paragliding accident in Malaysia: "While Frank was well on his way of recovery, but still in need of crutches, we three authors met in December 2008 and January 2009 in the spacy kitchen of his home in Amsterdam to work on our book. This 'kitchen informatics' created a nice and intense working atmosphere despite Frank's hardship." Alexandra Silva recounts meeting Frank after his first experience preparing meat on his newly acquired, high-tech grill at his summer house: "I will never forget the passion with which he described this and all the adjectives he used. In life, as in research, passion is the key to happiness and a great steak and wine are one step towards perfection! A lesson learned from Frank de Boer!" Lara Astefanoaei recalls Frank's good humor and witty remark: "I remember one of my first Dutch storms, I was… impressed :). Frank, not quite: cows and trees weren't flying yet, he observed, calmly. And with a laughter."

Several stories touch on Frank's ability to improvise. Davide Ancona observes that Frank is a very relaxed traveler: "Some years ago Frank and I happened to attend a conference at Riva del Garda (a nice Italian town on the Garda lake); we both agreed that the venue was very pleasant, but Frank was a bit disappointed since Verona was

not so close as he had expected; he knew that Verona was not so far away from the Garda lake (about 30 km) therefore he had decided to fly to Verona to get to the conference venue. After he arrived at Verona airport he got on a taxi to reach Riva del Garda; Frank did not mention anything about the reaction of the taxi driver, but told me placidly: Actually, the drive was longer than expected". In fact, Riva del Garda is more than 80 km from Verona (and more than 1 hour away by car). Reiner Hähnle points out that this ability to improvise also carries over to Frank's scientific abilities: "I've always been immensely impressed by Frank's capability to come up with a really good impromptu presentation without any preparation time whatsoever. This is how it goes: assume you had agreed with Frank that he gives a presentation at your project gathering a few weeks ago and that he actually made it to the meeting (but that's another story …). Now you ask him whether this or that time slot is ok. The reply, almost inevitably, is an incredulous 'Indeed? I really agreed to give a talk – now?'. Your heart sinks, but you don't worry, because: 'All right, I'll improvise something on the topic.' And he proceeds to give a really convincing talk, not necessarily about what you had originally agreed upon, but nevertheless the audience/reviewers/students are impressed and happy!"

One of the editors of this volume can confirm Frank's ability to improvise. After we had planned the EU project CREDO while driving around Beijing in a taxi looking for whisky, and had written the project proposal while escaping polar bears in Spitsbergen some months later, we were invited for contract negotiations in Brussels. Owing to certain misunderstandings, we were sent back and forth between the buildings of the European Commission for a while and arrived 20 minutes late for the negotiation meeting. The project officers clearly expressed their lack of appreciation for this delay and then asked Frank as coordinator to give his presentation of the project. "What, am I expected to present something? Sure, … I hope it is ok that I don't use slides?" Frank, of course, gave an excellent 20-minute presentation; the project officers completely forgot how annoyed they were and we got the funding.

This volume collects a number of papers by Frank's collaborators over the years. Their broad range of topics reflects Frank's versatility. On behalf of all your friends in science: Happy birthday, Frank!

January 2016

Erika Ábrahám
Marcello Bonsangue
Einar Broch Johnsen

Organization

This festschrift was organized by Frank's colleagues and friends Erika Ábrahám, Marcello Bonsangue, and Einar Broch Johnsen.

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