

I Ground-Truthing

The fact that techniques mediate advances suggests a way in which mathematical problems that arise in society are ultimately in some relationships with the techniques which that society has forged. This, in turn, suggests that mathematicians, like societies, can only pose those questions to which a potentiality of a response exists.

—Ritter (1995, 72)

The introduction presented the rationale of this inquiry. Now, obviously, the hard work begins: effectively doing it! We will start smoothly though, with two straightforward chapters. Chapter 1 specifies the overall setting of the inquiry: a well-respected computer science laboratory that specializes in digital image processing; I shall call it “the Lab.” I start by presenting its environment and some aspects of its organization as well as its place, modest but substantive, in the heterogeneous ecosystem of computer science industry. I will also consider methodological matters and discuss the notion of algorithm as it is generally presented in the specialized literature. Chapter 2 starts in the middle of things at the Lab’s cafeteria during a working session where the Group—three young computer scientists—tries to coordinate the development of a new algorithm. After a quick parenthesis where I present the basic issues at stake, we will closely follow this project, meeting along the way entities called “ground truths” whose importance in the constitution of algorithms we will learn to appreciate. The last section of chapter 2 will be a brief summary.

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The Constitution of Algorithms

Ground-Truthing, Programming, Formulating

By: Florian Jatón

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