A Visual News Processing Environment

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Abstract. CPP-TRS (Tonfoni 1989–94) is both a methodology and a language. Through the methodology (CPP – Communicative Positioning Program) those invisible aspects of communication are identified and represented by the meta-language (TRS – Text Representation Systems), which complements natural language. CPP-TRS is a new paradigm which applies to any communicative context.

Icons in CPP-TRS are not intended to represent words or sentences in order to substitute them; they are rather intended to represent visually what natural language does not convey naturally. The improvement of communication is a challenge of the present and the future: CPP-TRS is designed explicitly for it.

The CPP-TRS system thus is able to support the user with a set of visual tools, that are specifically suited to structuring text and communicating effectively.

The same tools can support communication very effectively in situations where ambiguity can highly compromise the final result.

The system may be used in a way that is either opaque or transparent to the reader of the text.

Key words: visualized communication, text-design, tools for writing, tools for reading, visualized texture of information

1. Introduction

CPP-TRS (Communicative Positioning Program-Text Representation Systems) (Tonfoni 1989–94) is a visual language which is based on a system of 12 canvases, 10 signals and 14 symbols and a further set of visual dynamic schemes. CPP-TRS is based on the fact that every communicative action is the result of a set of cognitive processes, and the whole system is based on the concept that the writer can enhance communication by visually planning and organizing therefore increasing the visual perception of a text. Based on a very simple syntax, CPP-TRS is capable of representing meaning and intention as well as communicative function visually. CPP-TRS is an unambiguous, fast and effective system for reinforcing natural language. It complements natural language by adding certain important elements that are not represented by natural language itself. These elements include communicative intention and communicative function of the text expressed by the writer, as well as the role the reader is supposed to play. The communicative intention and function of
a text in current news writing as well as the reader's role are invisible because
neither specific words nor punctuation convey them sufficiently and unambigously; they are therefore opaque. As a meta-language, CPP-TRS can be
applied to different news typologies both in a transparent and an opaque way.

2. Visualization

Relevant research has been conducted in visualization. Mc Kevitt (1994) and
Srihari (1995) show the main trends and applications in the field of integra-
tion of linguistic and visual information. Beardon (1993) carefully analyzes
the differences between the study of natural language and the design of an
iconic language. Yazdani (1991) describes an intelligent language tutoring
environment. The specific nature of CPP-TRS is now being described. The
CPP-TRS system consists of two consistently integrated parts. CPP is the
methodological component of the system: the CPP methodology enables the
reader to understand the writer's position towards certain news. It is a com-
plete program that provides visual schemes, models and tools aimed toward
organizing information effectively. TRS is the visual language component.
It is strictly integrated with the CPP methodology, and is the corresponding
way of representing those cognitive processes and communicative actions,
which have been previously identified by CPP.

As to be able to plan an Integrated Environment for supporting News
Processing (Packaging – Filing – Storing – Retrieving and Delivery) based
on CPP-TRS, it is absolutely important to think about different tools having
different purposes and different users. Users are newswriters, commentators
and readers.

The keyrole is played by the User, whom I would like to define as the
Chooser of those different tools which are available, according to his/her own
needs and preferences.

3. A Cognitive Punctuation System

A CPP-TRS based keyboard is one of the various applications of CPP-TRS
and it is specifically intended to support the writer and the commentator in
processing news with the whole visual system, which is being introduced as
an addition to the current system of punctuation and smoothly integrated with
it.

CPP-TRS constitutes a visual representation system that is as consistent
as the system of punctuation. The punctuation system in written language