Preface

The origin of PASRO (Trademark of BIOMATIK GmbH, Freiburg, FRG) was a set of procedures for performing arithmetic on geometric data types and for coordinate transformation for study and teaching purposes, developed as a base for high level robot programming. The study of many robot languages revealed areas for necessary improvements:

1. Move statements must be independent of a specific robot control system. They must instead be based on the different types of trajectory calculation resp. interpolation.
2. A structured language concept should be employed, including a structured concept for concurrent programming (The latter is not yet implemented in PASRO owing to the use of Standard PASCAL instead of CONCURRENT PASCAL or MODULA 2).
3. Integration of geometric data types into existing structured data types.
4. Simplicity of language constructs.
5. Integration of teach-in via frame-files.

This resulted in the implementation of PASRO by Christian Blume (BLUME [1.1]) and in the joint development of the SRL concept (Structured Robot Language) as it was introduced in May 1983 at Liège (see BLUME/JAKOB [1.2]).

PASRO is at present state of the implementation a programming system for teaching, studying and experimenting and not for industrial use, although it could easily be extended for that purpose (cf. paragraphs 8.2).

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Karlsruhe
Christian Blume
Berlin
Wilfried Jakob