

Peter Naur,

2014 October 11

Time-Line Computer Archive Ltd
Wigton
Cumbria,

Dear Time-Line Computer Archive Ltd

My work on Algol 60 has been described in many of my publications. These are available on my bibliography, which can be found on the net at www.naur.com. From this I quote the more important items:

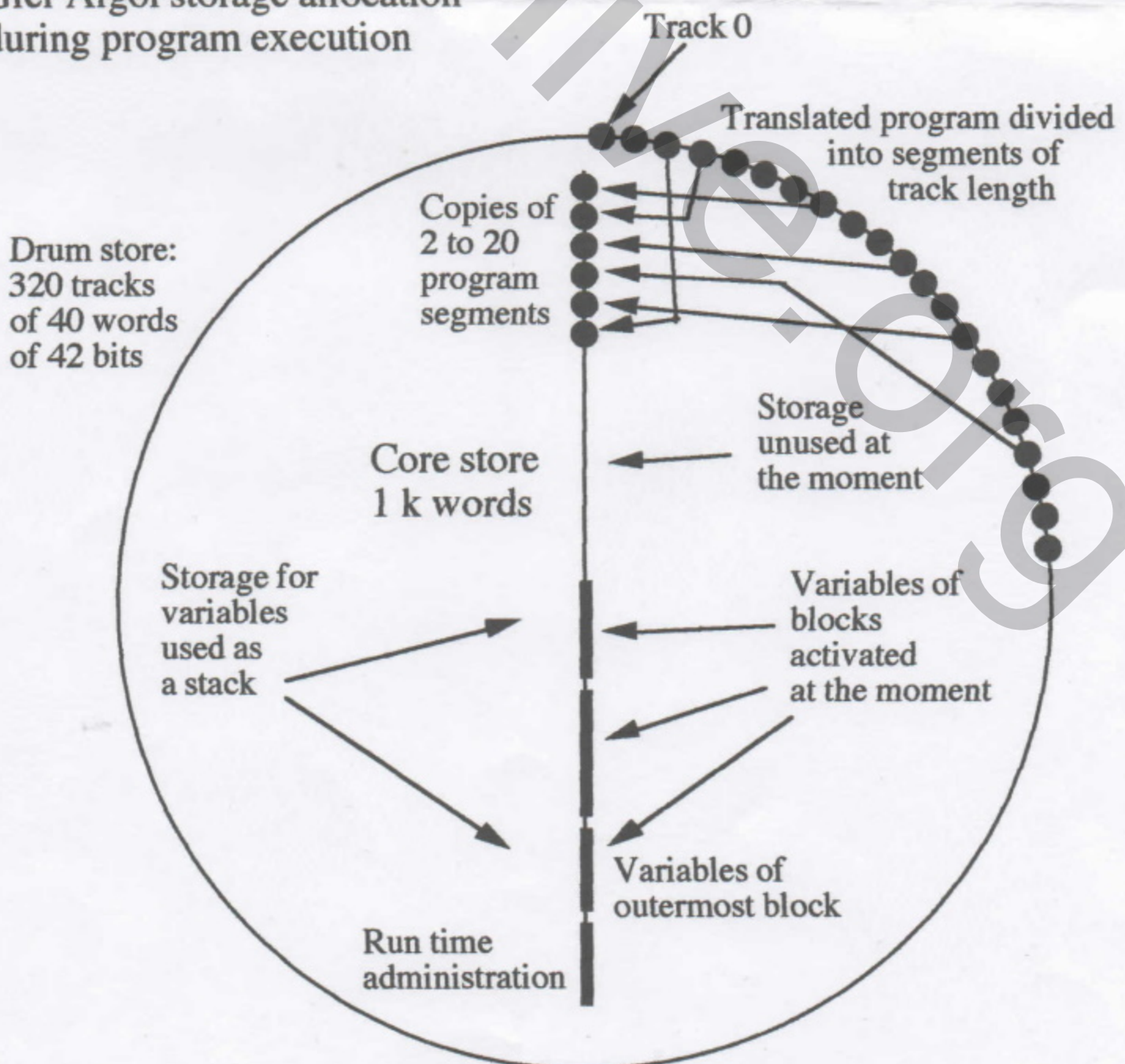
- PN141 *The design of the Gier Algol Compiler*. BIT Nordisk Tidskrift for Informationsbehandling 3 (1963), pp. 124-140 and pp. 145-166; Annual Review in Automatic Programming (ed. R. Goodman) Vol. 4, pp. 49-85; Russian translation: Sovremennoye Programmirovaniye, Sovjetskoye Radio, Moskva 1966, pp. 161-207. Reprinted in PN336 section 3. 1.
- PN298 *Paper: The European side of the last phase of the development of ALGOL 60, and transcript of presentation*. In R. L. Wexelblat (ed.): Proceedings of the History of Programming Languages Conference, Los Angeles, Calif., 1-3 June 1978. Academic Press, New York, 1981, pp. 92-139 and pp. 147-161. ISBN 0-12-745040-8.
- PN336 *Computing: A Human Activity*, ACM Press/Addison-Wesley, New York, 1992, 656 p. This includes PN141.

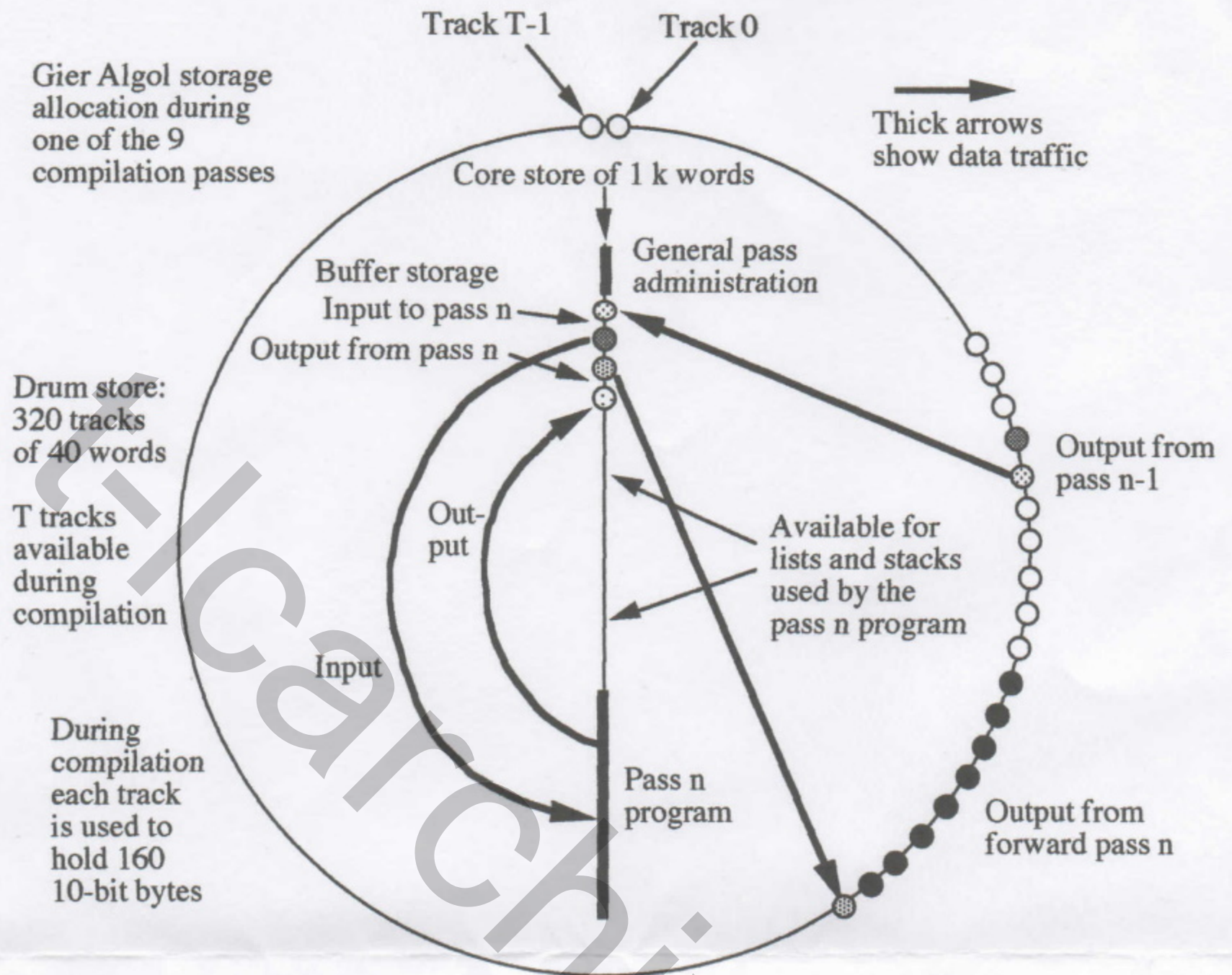
Below I give you two figures that I produced not long ago, as a help to understanding PN141.

Yours sincerely, *Peter Naur*

Peter Naur

Gier Algol storage allocation during program execution





Pass no.	Direction	Compile functions	Checking functions
1	Forward	Input character analysis	Micro structure check
2	Forward	Assemble identifiers	
3	Forward	Syntax analysis	Syntax check
4	Backward	Collect declarations at block begin	Multiple declarations
5	Forward	Distribute declarations	
6	Forward	Process expressions	Check that uses match declarations
7	Forward	Addressing of variables	
8	Backward	Program addressing	
9		Rearrange tracks on drum	

Eliminating syntactic faults in source program found in pass 3:

Source program Fault detected in pass 3

_____ ;xxxxxxxxxxxxxxxx?yyyyyyyyyyyyyyyyyyyy; _____

Skipped during pass 4 Skipped during pass 3