

SUMMARY: 4 slides

• interesting finite sequences

(high-level)
programs

(low-level)
programs

text

DNA strands

{ code synthesis
code optimization
language synthesis
(e.g. in machine translation)

{ protein folding,
genetic engineering

• however: of course,
any finite set of
data can be provided
with total ordering

- our focus : sequence
synthesis
- the same holds for macro processors (and parametric L systems)
- in contrast: Chomsky grammars have proved most useful in sequence analysis
- Chomsky grammars, pure grammars and (non-parametric) L systems were discussed only as tutorial examples
- our goal : distributed processing
 - confluence
 - distributive progressiveness
 - conditional soundness

ORTHOGONALITY of
the rule base and
the control mechanism!

- one of the two can
be modified without
touching the other,
as long as the
combination of the
two meets the
particular constraint
enforcing (conditional)
soundness

- Such constraints
seem the central
area for further
work ...

FINALLY,

two views at the work:

① top-down:

- introduction of tetrasystems
- what they can do: distributed step-wise refinement

② bottom-up:

- introduction of belt-selectors
- what they can do: construction of tetrasystems