**Language-Based Artistic Research
Example: Performance-Writing-Machine**

Historical Background
Nearly a century ago, that is in 1936, the mathematician Alan Turing experimented with text generating methodologies, simply working with paper and pencil. Using Turing's preparatory work, his colleague Claude E. Shannon developed a hands-on experiment which results were published in his paper titled „A Mathematical Theory of Communication" (1948) in *Bell System Technical Journal,* within which Shannon introduces simple text generation methodologies. In an adapted version one method could function as follows:

- Find a random letter on a text page.
- = F
- Find this letter on the next page of the text and name the word.
- = Feast
- Take the second letter of that word.
- = E
- Connect the the two letters.
- = FE
- Find the last letter of the letter combination on the next page and name the word.
- Eleven
- Take the third letter of that word.
- = E
- Connect the three letters.
- = FEE
- …
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Inspired by this simple and non-technical working approach, my language-based artistic research transforms Turing's „paper-machine" into a „performance-writing-machine". The performance-writing-machine's methodology is interested in the coincidence and randomness of text generation *per se*, but shows an expanded interest in computational linguistics and probability. Relating to *n*-gram models using statistical properties for predicting text sequences and related attention mechanisms, the machine's methodology focuses on text generation, rather than ‚editing' existing text coincidentally. Thus in a very first working phase, the performance-writing-machine complements Shannon's methodology with the following interruption tools:
I. Autocomplete
II. Selection
III. Sampling
IV. Duplication
V. Combination

I. Interruption-Tool: „Autocomplete"

To autocomplete means to type the input letters, word and/or
text fragments into a search machine on a computer.

Input:
Fee
Output:
Feet in cm conversion
Feedback
Feel the beat
Feet in meter
Fee
Feed
Feedly
Feet
Feedback geben
Feeder

II. Interruption-Tool: Selection

To select means to extract words and/or text fragments
depending on existing parameters.
Applied selection parameter: every 5th word

Output:
Feet in cm conversion
~~Feedback~~
Feel the beat
Feet ~~in~~ meter
Fee
Feed
Feedly
~~Feet~~
Feedback geben
Feeder

III. Interruption-Tool: Sampling

To sample means to copy selected text fragments and paste them
anew, while the words and/or text fragments are not altered.

Output:
Feedback in feet

IV. Interruption-Tool: Duplication

To duplicate means to use words and/or text fragments multiple times.

Output:
Feedback in feet
Feedback in feet
Feedback in feet
Feedback in feet
Feedback in feet
…

V. Interruption-Tool: Combination

To combine means to use different techniques (association, accumulation, overlap, …) to bring words and/or text fragments into relation with one another. The output can be combined with already existing text material. This is a very playful process.

Output:
Imagine a structure of feedback-giving that involves the human foot. Can this structure actually be measured in feet? What do a person's feet do while one gives another person feedback? How do feet respond? How are these materialities (feet vs. feedback) interrelated? What does one give back to the other? How can the performative dimension between the two become visible? …

These output questions are impulses for practical experiments on stage, which can be implemented directly within the performance work.