

Scores & Scripts — a Bestiary of Intent

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Abstract

A choreographer and a language designer collect and comment on a catalogue of notations of intent, each for their own purpose. We offer plural interpretations of their similarity, their purpose, their interpretation. The work is presented as a series of large posters each giving a different perspective of what it means to communicate intent.

Humanity

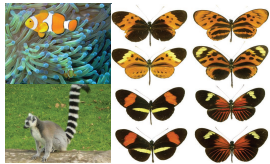
Carbon
(chemical)

Feeding the system

Silicon
(electrical)

Non-Human <> Non-Human Programming

Albert Bernhard Frank 1877



Animals engage in a wide variety of behaviours which affect each others' behaviour. These include mutualistic symbiosis (clown fish), territorial marking and communication (ring tailed lemur), Müllererian mimicry (Heliconius butterflies).

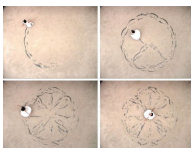
Human <> Human Programming

Lucinda Childs 1960



The choreographer Lucinda Childs is also well known for her use of 'grid structures'. For example, for the piece *Melody Excerpt*, she developed a 'grid' structure to represent all possible pathways that each dancer would traverse during the performance. The units used for stage measurement were in feet; in this version, the dimensions are 32 by 28 feet. Each dancer is represented by a distinct color.

Anne Teresa Keersmaeker 1983



Keersmaeker applies geometric patterns to grids for defining where on the stage and in what order the movement will take place: "In the early works several forms are recurrent: circle, square, lateral and diagonal lines, perpendicular lines forming a grid. Singing them out as shapes suggests a static disposition, whereas, conversely, these shapes evolve in time and are dynamically connected to the development of movement in its syntax and counterpoint." (De Keersmaeker et al., 2012)

Eshkol-Wachman movement notation 1958



A notation system for recording movement on paper or computer screen. The system is the result of an analytical process, which disassembles the phenomenon – body, space and time – into basic units. Similar to other non-verbal methods of notation, such as musical notes or the system of mathematical symbols, Eshkol-Wachman entails the possibilities of numerous combinations presented to creators in dance, education and research.

The objective is to employ the notation as a prescription for movement which performs a given or automatically produced score without human interference in its design. A source of entirely new experiences and observations, and the possibility of composing conditional programs in terms of a Movement Notation (built around the existing basic program for converting notated statements into pictures). One can formulate procedures for movement sequences, but their resulting shapes and compositions may not be predictable.

Society <> Society

Canals of Holland 17th century (and earlier)



A map showing Amsterdam with its canals from 1662; Currently, Amsterdam has more than one hundred kilometers of canals, about 90 islands and 1,500 bridges.

Map of Delft in 1649.



"For as long as the Dutch have been pumping water out of the lands in Holland, they have been building canals for travel, irrigation, and water removal. The famous canals of Amsterdam were a result of good city planning, and easily serve as additional streets for transportation. Leiden and Delft were also designed with canal transportation in mind."



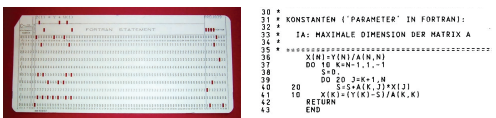
Tube map since 1908

The Tube map is a schematic transport map of the lines, stations and services of the London Underground, known colloquially as "the Tube", hence the map's name. The first schematic Tube map was designed by Harry Beck in 1931.



Human <> Computer Programming Sharing the space

Tangible + Textual

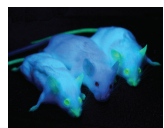


The Fortran Automatic Coding System John Backus, 1956

Designed by Backus to make it easier for him to write programs compared to the assembly languages of the day, FORTRAN became the first widely used language available on a number of architectures and is still used for benchmarking today. Early FORTRAN programs would be entered one line per card using a keypunch keyboard.

Human <> Non-Human Programming

Moel et al. 2012



Since 1974 experiments have been conducted on genetically modifying mice. The left and right mouse above have been modified to express enhanced green fluorescent protein. Genetic modification is used for a wide range of purposes from food production to medical research.

Humans programming of non-humans is not limited to genetic modification. Humans have trained animals since antiquity and increasingly engage in environmental engineering to 'program' complex ecosystems.

IKEA 1943



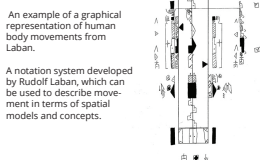
IKEA follow an approach they describe as 'democratic design', including for much of their history selling many of their products in flat-packs requiring self-assembly. This decreases shipping volume and makes the use of public transportation easier, but requires communicating to a very wide range of end-users how to complete final assembly.

Pina Bausch 1970

Pina Bausch presents the premiere of *Rite of Spring in the South Pole*. One stage covered in ice two million deep, 15 female dancers in thin slip dresses, 50 penguins, 1000-1100 including the sun which will be setting for the last time until it rises again in September.

Pina Bausch's unique style was characterized by a blend of movement, sound, and prominent stage sets. Her elaborate collaboration with performers during the development of a piece lead to the rise of a new style now known as Tanztheater.

Labanotation 1928

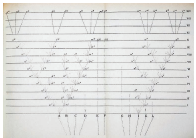


An example of a graphical representation of human body movements from Laban.

A notation system developed by Rudolf Laban, which can be used to describe movement in terms of spatial models and concepts.

Natural Agency

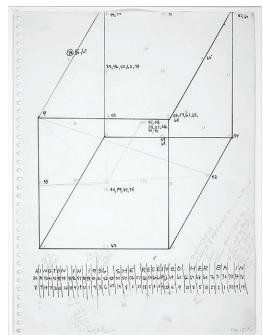
Charles Darwin 1859



On the Origin of Species outlines how populations evolve by a process of natural selection. This creates a behaviour that emerges over time due to the structure of reproduction rather than to intent by a conscious entity. At a wider scale, the Weak Anthropropic Principle (Carter, 1973) argues that for a universe to be observed, it must support a form of life capable of observation.

Trisha Brown 1970

Trisha Brown draws complex diagrams to specify the directions or points in space and create dance patterns. This is similar to vector drawings used in design, which are points determined by a set of coordinates and a direction, leading to a creation of a path.



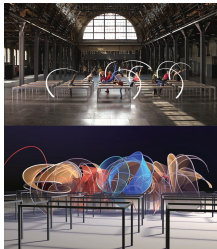
Computer <> Computer Programming

William Forsythe, Synchronous Objects 2009

"From dance to data to objects"

"What else might physical thinking look like?". This project examines the organizational structures found in William Forsythe's dance *One Flat Thing*, reproduced by translating and transforming them into new objects - ways of visualizing dance that draw on techniques from a variety of disciplines.

Can choreographic ideas be expressed other than through the body? This became one of the central questions underpinning the development of Synchronous Objects, a series of online interactive animations based on his ensemble choreography *One Flat Thing*, reproduced.



Scott Reed & Nando de Freitas, Neural Programmer-Interpreters, 2016



Neural Programmer-Interpreters (NPI) can learn to compose small programs together to build higher-level programs, from a small number of rich examples.

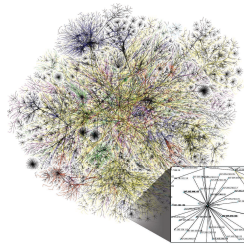
NPIs have been used to perform simple computational tasks such as sorting and canonicalizing 3D models.

Society <> Many Programs

Internet access since 1980/90's

An Opte Project visualization of routing paths through a portion of the Internet.

The World Wide Web (sometimes abbreviated "www" or "W3") is an information space where documents and other web resources are identified by URIs, interlinked by hypertext links, and can be accessed via the Internet using a web browser and (more recently) web-based applications. It has become known simply as "the Web". As of the 2010s, the World Wide Web is the primary tool billions use to interact on the Internet, and it has changed people's lives immeasurably.



Leaving the body

Many Programs <> Many Programs

Scores & Scripts a Bestiary of Intents

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