

1. Foundation of Information

Information = **selection** from a set or **domain**.

Preconditions for precise transfer of information are:

- (1) Well defined **domain** (for all participants of conversation)
- (2) Ordered **domain** (so that its elements are selectable by numbers)
- (3) Transfer of the **numbers** which show the **selection** in the domain

→ the new information carrier ("Domain Vector" resp. DV) has the form:

UL (of online definition) plus number sequence

UL = "Uniform Locator" on the internet (used for globally unique identification and definition),

- can be the URL or an abbreviated equivalent, e.g. a short numeric pointer (e.g. to a local URL table)
 - identifies the kind of numbers resp. data (like e.g. a file ending can identify the kind of data in the file)
 - is also a pointer to the online definition of the numbers, so it
 - **defines the domain** of a selection (globally uniformly)
- the **number sequence defines the selection** in the domain

The domain is defined online (globally) and called "domain space" (DS).

According to (2): The DS is a n-dimensional metric space whose elements are called "Domain vectors" (DVs).

2. Digital information

The Domain Vector (DV):

UL (of definition) plus number sequence

- can represent every definable information - **precisely**
- from a **simple** word to **complex** multidimensional information
e.g. in science, medicine, industry.
- **http://numericsearch.com** demonstrates searchability.
- DVs are internationally uniform and comparable for similarity search.
- The online definition can be **multilingual**,
- the meaning of DVs is **language independent** (if correctly defined)

Useful information is defined by **users**. The **users create** the search criteria.

- **The UL locates the definition (e.g. as URL or abbreviated equivalent)**
- **Existing online definitions can be reused
(linked together and recombined) in new definitions.**
- **For search (and before providing data)
users can select DSs with the best (most meaningful) definitions.
This motivates to create better and better definitions.**

3. User defined searchable information

The DV:

UL (of def.) plus number sequence

enables the combination:

- **maximal competence** (definition by all internet users)
- **maximal efficiency** (**number sequence**) (allows maximal entropy)

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