# Prime specification

Shigeo Hattori

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bayship.org@gmail.com
https://github.com/bayship-org/mathematics

## 1 Prerequisite definitions

GitHub:Minor_of_memBer.pdf

In the article above, in its first two pages, all prerequisite definitions for this article are given. Especially, the second page of the above article defines that:

- A **memBer** as a member of a set.
- Deep members $y$ of a memBer $x$ is calcurated **the deep number relative to** $x$.
- Two memBers $(x, y)$ are said ($x$ is a **minor** of $y$).

## 2 Notations

**Definition 2.1.**
"And" is also written as " $_{and}\wedge$ ".
"Or" is also written as " $_{or}\vee$ ".

$(x \ {}_{and}\wedge \ y)$ is not commutative because $y$ possibly depends on $x$.
$(x \ {}_{or}\vee \ y)$ is not commutative because $y$ possibly depends on $\neg x$. ■

## 3 Order consistent

**Definition 3.1** (Order consistent)**.**
Take $\forall L$ as a logical expression such that ( *1 implies *2 ).

Then $L$ is said order consistent.

**1.** Take $\forall(f, p, q, r, d)$
such that (*s1 ${}_{and}\wedge$ ..... ${}_{and}\wedge$ *s3) holds.

**s1.** $L$ defines $(f, d)$ as a function $f$ and a partial order $d$.

**s2.** $\{p, q, r\} \subset \mathrm{domain}(f)$.

**s3.** In terms of $d$,
$p < q < r$.

**2.** In terms of $d$,
$f(p) \leq f(q) \leq f(r) \vee f(r) \leq f(q) \leq f(p)$.

# 4 Consequent context of antecedent context

Take $\forall D$ as a definition. Then $D$ is said an antecedent context if: $D$ is independent.
Take $\forall A$ as an antecedent context.
Take $\forall D$ as a definition. Then $D$ is said a consequent context of $A$ if: (if $D$ is dependent of at most $A$).
Take $\forall C$ as a consequent context of $A$.

Take $\forall x$ as a variable of $C$. Then $x$ is said **specified for all instances of** $A$ if (
$x$ is specified if you assume that all variables of $A$ are specified ).
For example, let $A$ define $\forall n :\in \mathbb{N}$ and $C$ define $x := n + 1$. Then $x$ is specified for all instances of $A$ because if $n$ had been specified in $A$ then $x$ is specified.

# 5 Conjecture

**Conjecture 5.1** (Conjecture)**.**
Take $\forall(n, X, T, M)$ as the Euclidean space $(X, T, M)$ of $n$-dimension where $X$ is the space, $T$ is the topology and $M$ is the metric table.
As a remark, for the set of all orthogonal coordinate systems for the space, no absolute member is defined.
Let $A := (n, X, T, M)$.
Take all $(C, x)$ such that (*1 ${}_{and}\wedge$ *2 ${}_{and}\wedge$ *3).
Then $x$ is a minor of $T$.

**1.** $C$ is a consequent context $C$ of $A$.

**2.** $x$ is a variable of $C$.

**3.** $C$ is order consistent.

# 6 Examples

This section just gives examples of substituting actual values into variables of the main conjecture.

**Definition 6.1** (Unknot)**.**
Refer to the main conjecture for $(n, X, T, M)$.
For the main conjecture, this example substitutes values
into $(n, x)$ as (*0 $_{and}\wedge$ ..... $_{and}\wedge$ *7).

**0.** Let $n := 3$.

**1.** Take $\forall k1$ such that (
Space$(k1) \subset X$ $_{and}\wedge$
$k1$ is said an unknot on $(X, T, M)$
).

**2.** Let $K := \{k \mid ((T, k), (T, k1))$ are isomorphic $\}$.

**3.** Take $\forall k :\in K$.

**4.** $f1(k) := \{d \mid d$ is a proper knot diagram of $k\}$.

**5.** $f2(k) := \{r \mid$
$\exists d :\in f1(k)$ $_{and}\wedge$
$r$ is the number of crossings on $d$
$\}$.

**6.** $f(k) :=$ "the maximum number of $f2(k)$.

**7.** $x := \{k \mid f(k) = f(k1)\}$.