**IAO Revision Proposal**

The basic idea underlying this revision proposal is what philosophers refer to as the primacy of the mental; all aboutness is rooted in mental directedness represented in sentences such as

1. I can see the mountains
2. I am pleased to see you
3. John is thinking about Mary
4. John is thinking about magic dust
5. I am reading about Barack Obama
6. I am reading about Julius Caesar
7. Mary is reading about Sherlock Holmes
8. Fritz feels pain in his right arm [in a case of phantom limb pain]

Each of these sentences represent a relation-like quality of a subject, a type of mental directness, which in the literature is referred to as ‘intentionality’. This is relation-like, rather than relational, since, as in the case of 4. and 7. it may be true that the subject intends X, yet false that X exists.

We adopt as primitive the **intends** quality, and we assert that at least part of the truthmakers for each of 1.-7. above is captured by the following:

1. I **intend** the mountains
2. I **intend** you
3. John **intends** Mary
4. John **intends** magic dust
5. I **intend** Barack Obama
6. I **intend** Julius Caesar
7. Mary **intends** Sherlock Holmes
8. Fritz **intends**his right arm

‘**Intends’** is to be understood in such a way that each of these assertions will still be true even though the object expression is non-referring. Thus ‘**intends**’ has an adverbial meaning, captured in:

1. I **intend** mountains-ly (or those mountains-ly, mountains-wise, in a towards-mountains-like fashion)
2. I **intend** you-ly
3. John **intends** Mary-ly
4. John **intends** magic-dust-wise
5. I **intend** Barack-Obama-ly
6. I **intend** Julius-Caesar-ly
7. Mary **intends** Sherlock-Holmes-ly
8. Fritz **intends**his-right-arm-wise

Note that all of the above are true independently of whether there is any target**.** Where there is such a target, we can make an assertion which strengthens ‘**intends’** to the relational expression ‘**intentionally-directed-towards’**, as in:

1. I am **intentionally-directed-towards** the mountains
2. I **intentionally-directed-towards** **intend** you
3. John **intentionally-directed-towards** Mary
4. I am **intentionally-directed-towards** Barack Obama
5. I am **intentionally-directed-towards** Julius Caesar

(We leave open, here, the question of whether 8\*\* admits of a relational treatment through an interpretation which sees the site of Fritz’s pain as involving his right arm as an entity existing in the past. We also leave open interpretations of 4, 7 and 8 which involve viewing the respect targets of intending as types.)

Both **intends** and **intentionally-directed-towards** belong not to IAO but to MFO. By extension, to say that a mental process intends an entity is to say that the subject of this mental process is the bearer of a mental quality that intends this entity. (In what follows the difference between mental quality and mental process will play no role.)

Note that a first-person case where ‘I **intends** ---’ may be phenomenologically indistinguishable from a first-person case where ‘I am **intentionally directed towards** ---’ is true.

Note that a third-person case where ‘John **intends** ---‘’ may be neurologicallyindistinguishable from a third-person case where ‘John is **intentionally directed towards** ---’ is true**.** For example when John simultaneously believes that Julius Caesar was a Roman Emporer and that Maximus Decimus Meridius was a Roman Emporer but is not aware that ‘Maximus Decimus Meridius’ is a fictitious name. Similarly, if infant Mary is reading a picture book containing pictures labeled ‘zebra’ and ‘unicorn’, when she is not aware that ‘unicorn’ does not refer. Note that in such a case Mary is not intending what is in her own mind. If there is no object in external reality which a given mental process is intending, this does not mean that the mental process involved is somehow one of intending some entity in an internal or conceptual reality.

**Defined Relations**

**Intends** and **intentionally-directed-towards** are mental qualities of cognitive subjects, which is to say qualities having to do with the mental directedness of mental processes occurring in such subjects.

In moving from the account of **intends** and **intentionally-directed-towards** in the above to the IAO relation of aboutness, we first define what it is for an SDC to be conformant to a mental quality, as follows:

s is\_conformant\_to m =def. s is an SDC and m is a mental quality

&there is some GDC g which is such that (s concretizes g and m concretizes g)

Trivially every mental quality that is capable of being expressed in some GDC (for instance every linguistically expressible belief) is conformant to itself.

We can now define aboutness, as follows:

s **is\_about** entity e = def.

either 1. s is a mental quality which is about e

or 2. there is some mental quality m which is such that s is\_conformant\_to m

or 3. (a) s is the product of a process (e.g. in a bank’s computer) for producing SDCs deliberately designed (e.g. by the programmers of the bank’s computers) to be such that there could be some mental quality (e.g. of the brain of the bank’s auditor) which is conformant to s

& (b) s is such that there could be some mental quality which is conformant to s and is about e

Thus aboutness is always relational. The problem addressed below is that IAOs, even where they are produced by a reliable process for being about something, sometimes fall short of aboutness, e.g. because of errors.

**Aboutness for GDCs**

GDC g is\_about entity e =def. there is some SDC which concretizes g and is about e

Hypothesis: If g is about e then SDCs concretizing g are produced by a reliable process for producing SDCs which are about what they are intended to be about.

Theorem: If g is a GDC and s concretizes g, then s is an SDC

Axiom: For all GDCs g, if g is about e and s concretizes g then s is about e

**More Background: The Theory of Signification**

A core doctrine of medieval philosophy is the distinction between mental language, spoken language and written language. Signification occurs when we get people to think of one entity by presenting them with another entity, a sign.

A problem with the theory of signification is that, when we are presented with,

1. ‘the cat is on the mat’
2. ‘the mat is on the cat’

then we are presented with the same signs and thus with the same things. Unless we can somehow take account of order or arrangement. The medieval sought to do this by distinguishing primary intention and secondary intention.

In 1. the cat is primarily signified, the mat is secondarily signified (the cat is signified on-the-mat-ly); in 2. the order is reversed.

Similarly, ‘father’ primarily signifies *the adult man*, but it secondarily signifies *the child* (the adult man is signified *child-ly*)

These ideas continued in Peirce, Brentano, Husserl, Chisholm.

both ‘intends’, ‘about’

**Failure of reference**

unicorn, king of France are all descriptive – ‘unicorn’ about horses and horns …

true of fake terrorists too

arrangement / IQE looks at contrast on a certain level of granularity

this piece of paper displays this arrangement (relative to …)

arrangements are roles

Norman Kretschman on medieval semantics and philosophy of language

Peirce semiotics – based on notion of sign, triadic relation:

sign, community or person, object