A Procedure Run on Engagement Functions and Behavior Relationships.

Frank Appiah
A PROCEDURE RUN ON ENGAGEMENT FUNCTIONS AND BEHAVIOR RELATIONSHIPS.

FRANK APPIAH.

KING’ COLLEGE LONDON, CENTRE OF DOCTORAL STUDIES, ENGLAND, UNITED KINGDOM.

appiahnsiahfrank@gmail.com.

Extended Abstract. A generalized enact functions are programmed as logic function with an enact program. This is executed to run the enact parameters against the enact facts described as engagement functions of enact. The behavior relationships of chain of commands are represented mathematically to create behavior dominance of agent interest.

Keywords. enactmen, agent parties, enaction, attention, enact, chain of command, dominance relation, behavior relationship, precedence relation.

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*AFFILIATE. UNIVERSITY OF LONDON, KING’S COLLEGE LONDON, DEPARTMENT OF INFORMATICS, LONDON, UK.
1 INTRODUCTION

The behavior relationships of the agent interest and attention is determined from the linear order of the enact functions of engagement. The engagement functions[2] of enact are:

(i) \( \text{enact} \{a_1, a_2, \text{rank}_1\} \),

(ii) \( \text{enact} \{a_2, a_3, \text{rank}_2\} \),

(iii) \( \text{enact} \{a_3, a_4, \text{rank}_3\} \),

(iv) \( \text{enact} \{a_4, a_5, \text{rank}_4\} \),

(v) \( \text{enact} \{a_n, a_{n+1}, \text{rank}_n\} \) : Generalized Enact Functions.

The engagement functions of enact can be read as:

(i) An enactment will run if the enact parameters are \( a_1 \), \( a_2 \) and \( \text{rank}_1 \) respectively.

(ii) An enactment will run if the enact parameters are \( a_2 \), \( a_3 \) and \( \text{rank}_2 \) respectively.

(iii) An enactment will run if the enact parameters are \( a_3 \), \( a_4 \) and \( \text{rank}_3 \) respectively.

(iv) An enactment will run if the enact parameters are \( a_4 \), \( a_5 \) and \( \text{rank}_4 \) respectively.

(v) An enactment will run if the enact parameters are \( a_n \), \( a_{n+1} \) and \( \text{rank}_n \) respectively.
2 ENGAGEMENT PROGRAM

The engagement program[1, 2, 3, 5] will run procedurally from (i) to (v). The enact function can be an assertion. That is a true or false evaluation.

PROGRAM
enact(A, B, C);

In executing the program, if the engagement functions (i) to (v) be evaluated on an enact parameter $A = a_2$, $B = a_4$, $r = \text{rank}_2$
then

```
enact(A = a_2, B = a_4, r = \text{rank}_2) = \text{FALSE}.
```

It is false because $B$ value is $a_3$ according to enact fact (ii) and not $a_4$ even though $A$ and $R$ have correct values.

A second execution on $A = a_1$, $B = a_2$, $r = \text{rank}_1$:

```
enact(A = a_1, B = a_2, R = \text{rank}_1) = \text{RUN}
enact(A = a_1, B = a_2, R = \text{rank}_1) = \text{TRUE}.
```

It evaluates to true because it matches the enact fact according to the engagement function of enact(i).
A second execution on $A = a_1$, $B = a_2$, $r = rank_1$:

\[
\text{enact}(A = a_1, B = a_2, R = rank_1) = \text{RUN}
\]

\[
\text{enact}(A = a_1, B = a_2, R = rank_1) = \text{TRUE}.
\]

It evaluates to true because it matches the enact fact according to the engagement function of enact(i).

A third execution on $A = a_1$, $B = a_2$, $r = rank_4$:

\[
\text{enact}(A = a_1, B = a_2, R = rank_4) = \text{RUN}
\]

\[
\text{enact}(A = a_1, B = a_2, R = rank_4) = \text{FALSE}.
\]

It evaluates to false because it does not again match the enact fact according to the engagement function of enact(i).

A fourth execution on $A = a_2$, $B = a_5$, $r = rank_3$:

\[
\text{enact}(A = a_2, B = a_5, R = rank_3) = \text{RUN}
\]

\[
\text{enact}(A = a_2, B = a_5, R = rank_3) = \text{FALSE}.
\]

It evaluates to false because it does not match the enact facts according to the engagement function of enact(i) to (v). $A$, $B$ and $R$ are all mismatch for the enact database.
3 BEHAVIOR RELATIONSHIP OF AGENT INTEREST

The linearizing ordering of the chain of commands[2] is as follows:

\[ a_1 \rightarrow a_2 \rightarrow a_3 \rightarrow a_4 \rightarrow a_5 \rightarrow a_n \rightarrow a_{n+1} \]

There is an implication[7] row for \( a_5 \rightarrow a_n \) ranked at the fifth position in the linear process. The behavior relationship[6, 8] can be represented by replacing the arrow with a \(<\) (less than) relation. The behavior relationship of the agent[3] interest and attention can be as:

\[ a_1 < a_2 < a_3 < a_4 < a_5 < a_n < a_{n+1} \]

The behavior relationship of the agent interest are dominance relation and behavior dominance.

<table>
<thead>
<tr>
<th>Dominance Relation</th>
<th>Behavior Dominance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) (a_1 &lt; a_2)</td>
<td>Actor 2 has interest that dominates Actor 1's interest.</td>
</tr>
<tr>
<td>(ii) (a_2 &lt; a_3)</td>
<td>Actor 3 has interest that dominates Actor 2's interest.</td>
</tr>
<tr>
<td>(iii) (a_3 &lt; a_4)</td>
<td>Actor 4 has interest that dominates Actor 3's interest.</td>
</tr>
<tr>
<td>(iv) (a_4 &lt; a_5)</td>
<td>Actor 5 has interest that dominates Actor 4's interest.</td>
</tr>
<tr>
<td>(v) (a_n &lt; a_{n+1})</td>
<td>Actor n+1 has interest that dominates Actor n's interest.</td>
</tr>
</tbody>
</table>
The dominance relation of the agent's interest and attention can be read as:

(i) Actor 1’s interest value is less than Actor 2’s interest.
(ii) Actor 2’s interest value is greater than Actor 1’s interest.
(iii) Actor 1’s interest value is less than Actor 4’s interest.
(iv) Actor 3’s interest value is greater than Actor 1’s interest.
(v) Actor n's interest value is less than Actor (n+1)'s interest.

\[
\text{Dom} := \{A^2 : \prec; a_1, a_2 \in A\} : \text{Domain expression.}
\]

\[
\text{DomSet} := \{a_1, a_2, a_3, a_4, a_5, a_n, a_{n+1}\}
\]

The chain of commands demands a precedence relation[3] for procurement enact. This can be written as:

<table>
<thead>
<tr>
<th>Precedence Relation</th>
<th>Precedence Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) (a_1 &lt; a_2)</td>
<td>Actor 1’s interest causes a precedence relation to Actor 2’s interest. Actor 1 precedes before Actor 2 in command.</td>
</tr>
<tr>
<td>(ii) (a_2 &lt; a_3)</td>
<td>Actor 1’s interest causes a precedence relation to Actor 2’s interest. Actor 1 precedes before Actor 2 in command.</td>
</tr>
<tr>
<td>(iii) (a_3 &lt; a_4)</td>
<td>Actor 1’s with interest, (a_3) precedes before Actor 2’s interest.</td>
</tr>
<tr>
<td>(iv) (a_4 &lt; a_5)</td>
<td>Actor 1’s having interest (a_4) will precede before Actor 2 with interest (a_5).</td>
</tr>
<tr>
<td>(v) (a_n &lt; a_{n+1})</td>
<td>Actor 1’s (n) interest causes a precedence relation to Actor 2’s ((n+1)) interest. Actor 1 precedes before Actor 2 in command.</td>
</tr>
</tbody>
</table>
3 CONCLUSION

In conclusively remarks, the findings of this research includes the following:

- Agents now run an engagement program via enact function.
- Agents now ranks their actions in any engagement function of enact.
- Agents are now behaving in relation to their agent interest.
- Agents will find dominance in their behavior relationship.
- Agents has an art to act in accords with other actor.
- Agents action is a linear process.
- Actors in agency with less interest value will have less attention in relationship.
- Agents will now demand precedence relation to procurement enact.
- Actor in agency with higher interest will precede without the other.
- Actor in agency having higher interest will precede before the other.

Compliance with Ethical Standards:

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Conflict of Interest:

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REFERENCES