

Verb/Noun Matching in Process 1 & 2 Comparison

Spectrum PAWs and CP/M PAWs behave very differently when it comes to including VERBS & NOUNS as part of the entries in Process 1 and 2 (and any calls from those tables to sub-processes).

On the Spectrum you can use the VERB and NOUN spaces at the start of each entry as “comments” to help you remember what each section of code does. In fact, the manuals actively encourages this.

In the CP/M version you can't. The CP/M version will strictly try to match VERBs and NOUNS in every process table, even in Process 1 and 2. If the VERB or NOUN in the entry does not match the values currently held by the parser then that entry will not be triggered.

I've put together a simple InPAWS file to demonstrate it. It's called **test.paw** on the site. You can compile this, using InPAWS to *test.TAP* for the Spectrum and *test.SCE* for the Amstrad.

Here are the key parts of that file, namely Process 1 and 2. You'll remember that Process 1 is called after the location text is printed and Process 2 is called on the “computer's turn”. In this instance that will be immediately after the location text & process 1 have triggered and after every input.

```
PROCESS 1
{
  * *: AT 0 ANYKEY GOTO 1 DESC; // Title page then go to location #1
  MATCH *: MES 0; // You'll only see this on the Spectrum, unless the last verb used was MATCH
  _ THIS: MES 1; // or this one, unless the noun was THIS
  _ _ : PROCESS 3;
  _ _ : NEWLINE LISTOBJ;
}

PROCESS 2
{
  TEST *: MESSAGE 2; // This will always be printed on the Spectrum
           // but only on the Amstrad when the last verb typed in was TEST
}

PROCESS 3
{
  * SUB: MES 3;
}
```

You can see that I've included four entries where I've used a VERB or a NOUN as part of the entry instead of the usual * *, * _ , _ * , or _ _ .

MATCH * prints “You won't see this message on the Amstrad unless the last verb was MATCH.”

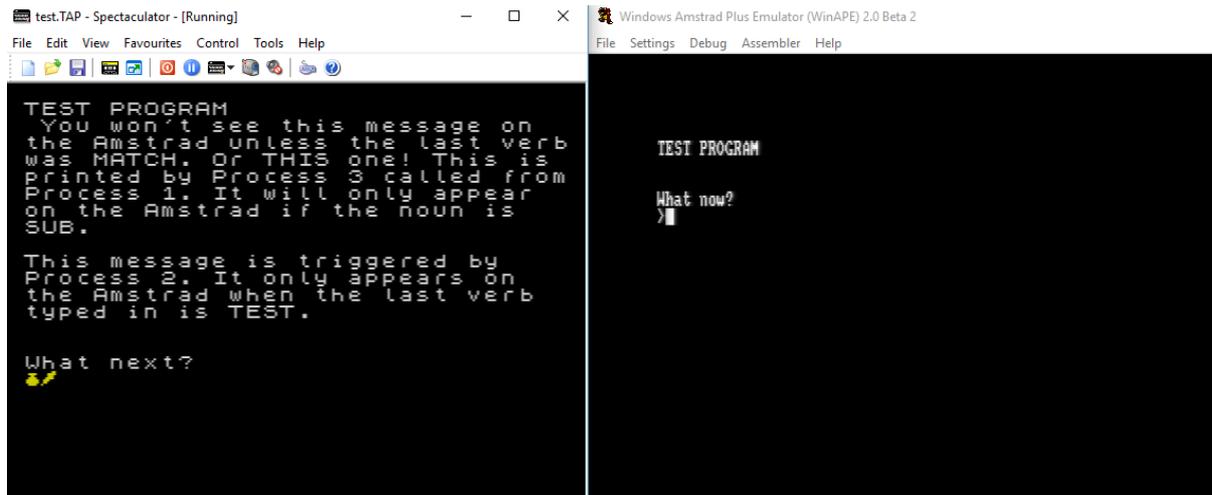
_ THIS prints “Or THIS one!”

TEST * prints "This message is triggered by Process 2. It only appears on the Amstrad when the last verb typed in is TEST.";

And finally, *** SUB** is in process 3, which is a sub-process called by process 1, and when triggered it prints " This is printed by Process 3 called from Process 1. It will only appear on the Amstrad if the noun is SUB.";

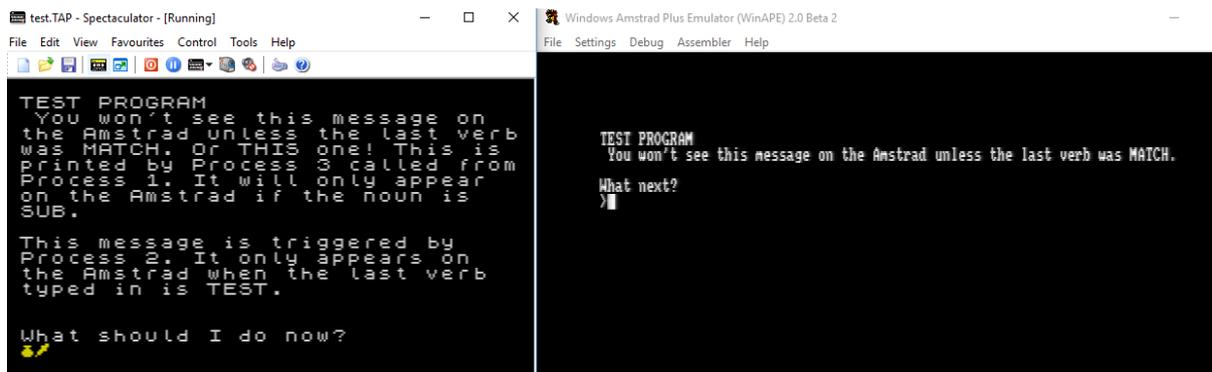
When the .TAP and .SCE are turned into adventures, we can see this code in action and it demonstrates the different ways the two interpreters work through those key process tables.

Here's the code running side by side. On the left is the ZX Spectrum version and on the right is the CP/M version running on an Amstrad emulator.



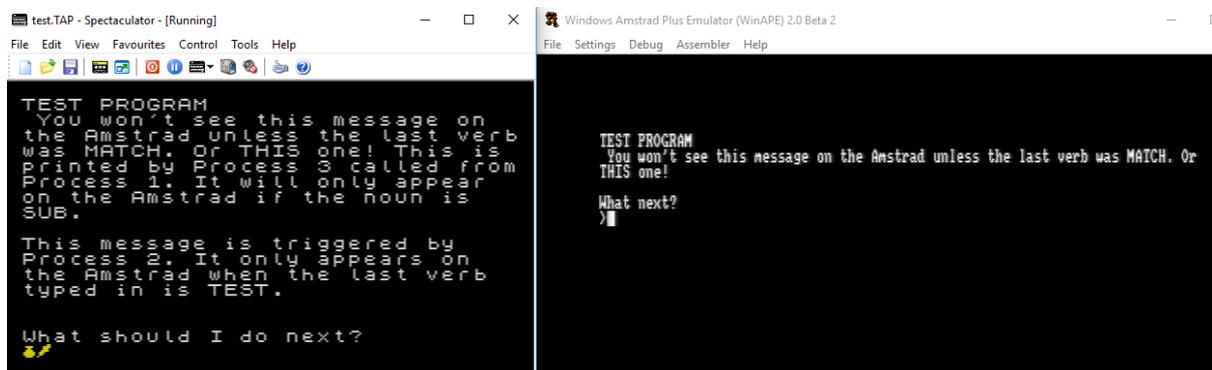
Only the location text 'TEST PROGRAM' appears on the Amstrad because the Amstrad version is strictly matching the entries in the process table.

If I type the command **MATCH** and press enter...



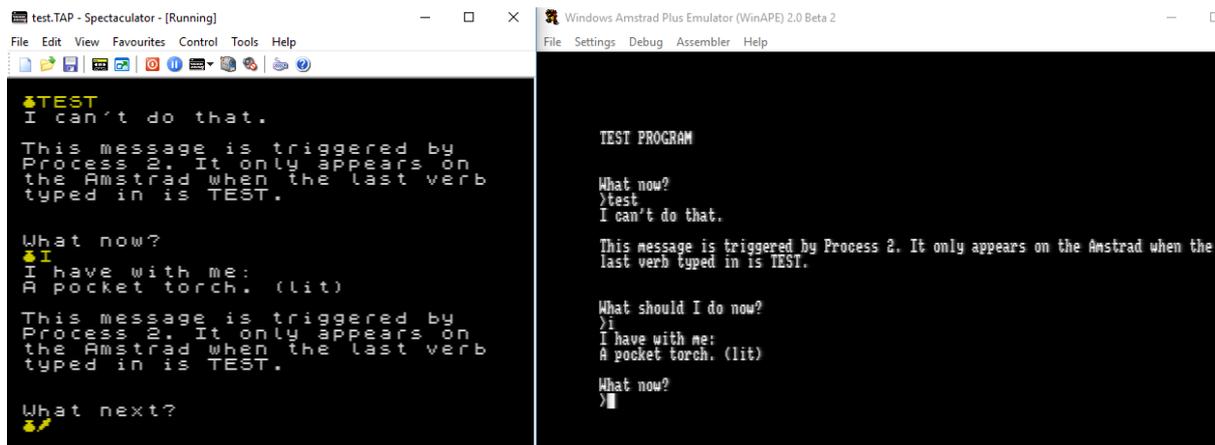
Now, the Amstrad version matches the entry **MATCH *** in process 1 and prints that additional message.

If I type the command **MATCH THIS** and press enter...



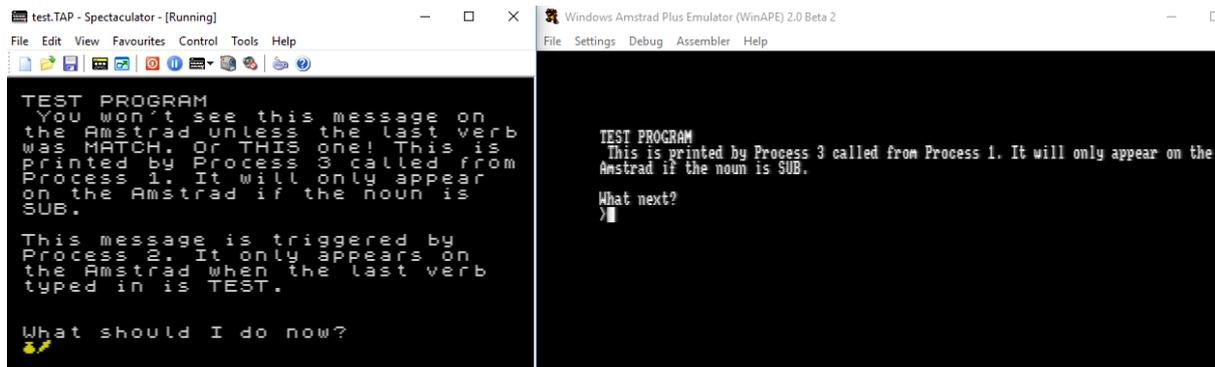
Both the **MATCH *** and **_ THIS** entries are triggered.

If I type **TEST** followed by **I**, I get...



Which shows how the **TEST *** part of Process 2 (the computer's turn) is triggered only when it matches the verb in the input line.

Finally, if I type the command **SUB**...



...the *** SUB** entry is triggered in Process 3, which is called from Process 1, showing that strict matching is on for any sub-process called from Process 1 or 2.

So, a reminder...

The CP/M version of the PAWs **will always** attempt to match any VERB or NOUN in entries in all process tables, not just ones called from the response table.

The Spectrum version will not.

If you are converting a game from the Spectrum to the Amstrad then you will need to remove any VERB / NOUN tags from Process 1 and 2, keeping the order of the entries intact.

You will then need to identify any other processes that are called from process 1 or 2 and remove the comment tagging from those sub-processes too.

Any processes that are called from the response table, in a Spectrum database, usually have VERBs and NOUNs attached for a reason... they should be left alone when you do your conversion.