

Spider-man Sophisticated, or What?

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We call them 'Long Underwear Characters'

When I was a kid, reading *The Amazing Spider-man* (ASM) for the first time, the story lines seemed the height of sophistication: so many plotlines, all those boring girls for Peter to fend off (I was only 10), and Aunt May ill again!

Recently I've been dusting off my collection of 1970's UK reprints, and couldn't resist the urge to read them again. Not surprisingly, I didn't find them quite as difficult to understand as before, but they're still exciting and great fun.

If you read the comics in a long sequence, the plotting does seem to get more complicated, as does the development of the villains and supporting characters. Supporting characters get higher billing and the action sometimes takes a backseat. I wanted to pin down these trends and, being a mathematician by training, I went the number-crunching route: I started counting panels in each issue and feeding them through Microsoft Excel. I've written an academic-style report on the analyses (see <http://fivedots.coe.psu.ac.th/~ad/marvel/asml.pdf>), but here I'll give a non-technical summary.

I looked at Spider-man's first appearance in *Amazing Fantasy* #15 (AF15), and almost all ASM issues up to and including issue #81. These cover August 1962 to February 1970. Stan Lee is the credited writer for all these comics, with Steve Ditko sharing credit for #26-38 (excepting #31), and John Romita involved in the writing of issues #77, #78 and #81. Steve Ditko is the penciller until #38, replaced by John Romita after that; Romita received help from assorted bullpen staff starting from #57.

Villains: evil is their middle name

27 villains were introduced during Steve Ditko's tenure, 15 afterwards. That's quite a drop, and might be due to villain-creation fatigue. In fact the numbers suggest that the existing rogues gallery was being examined in more depth.

Dr. Octopus appears the most often – the leader with 10 issues. The Kingpin comes in second with 9, and the Green Goblin is third with 8. The Goblin should have a larger count due to his appearance in *The Spectacular Spider-man* #2, "The Goblin Lives" (November 1968). This 58 page story fits quite neatly into the main ASM sequence between issues #67 and #68, although there's no reference to it in #68.

In general, villains start appearing for longer as the ASM sequence progresses. Also *new* villains appear for longer (e.g. the Kingpin, Silvermane, the Rhino). Complete story arcs are no longer than 3 issues, except the four-issue appearance of Dr. Octopus in the mid #50's, which isn't repeated.

A villain-related story device which appears for a long period later in the sequence is the tablet holding the formula for the fountain of youth. It hangs around for 8 issues (#68 to #75).

Supporting Characters: the real pussywillows

A surprisingly difficult problem is deciding what makes for a supporting character. I fixed on the person having a name, appearing several times, and interacting with Peter/Spidey without the need for a punch-up, or the (full-time) support of Spandex.

21 new supporting characters appeared during Ditko's term, 7 afterwards (guess who they all are ☺). There's a quiet period of no new supporting characters after #31, but this changes in the late #60's.

Issue #52 sees the introduction of Joe Robertson, the Bugle's city editor. He's the first major black character in ASM; Foswell dies in the same issue, so the total number of useable supporting characters doesn't change. Issue #56 introduces Captain Stacy.

A flurry of new characters in #67, #68, #71, and #78 are all black. They include Robertson's family, Josh the campus 'radical', and Hobie Brown (the Prowler) and his girlfriend. This may indicate a shift to cater to a wider readership, and a desire to introduce some new themes.

Statistics show that the *number* of supporting characters appearing per issue after Ditko's time is significantly higher.

Do Supporting Characters appear often?

I started to get carried away with this question, and created the %supporting value. It's the total number of panels spent on supporting characters in an issue, divided by the total number of panels in the issue. The higher %supporting gets, the more space is being spent on supporting characters.

Graphs of the number of supporting characters per issue and of %supporting per issue hint at a gradual rise in the number of supporting characters per issue, and the space allotted to them, peaking in the mid #40's, and then slowly falling afterwards. Issue #47 is the high point with 13 supporting characters, many of them present as Kraven the Hunter kidnaps Harry Osborn. The %supporting value for #47 is the largest during the entire sequence.

Statistics show that the number of panels per issue given over to the supporting characters is significantly higher later in the sequence.

Who are the main Supporting Characters?

I found 28 supporting characters, but who are the main ones? Maths to the rescue again: I calculated the average number of panels for each supporting character by totaling the number of panels for each one and dividing by the total number of issues. Also, to highlight changes in the mix of characters after Ditko's departure, I separated the sequence into two parts.

The top 8 ranked supporting characters during Ditko's time, with their average number of panels in brackets, are: Peter Parker (32.1), J Jonah Jameson (10.7), Betty

Brant (8.5), Flash Thompson (7.3), Aunt May (5.3), Liz (4.2), Foswell (1.8), Gwen Stacy (1.6).

The top 8 ranked supporting characters after Ditko's time are: Peter Parker (18.7), J Jonah Jameson (7.9), Gwen Stacy (6.1), Captain Stacy (4.5), Harry Osborn (4.4), Aunt May (3.9), Joe Robertson (2.3), Mary Jane (2.3).

It's difficult to compare the average number of panels between the two lists since the total number of panels per book decreases sharply between the two subsequences.

What can be compared across the list is *movement* in the rankings. Betty Brant, Flash Thompson, Liz, and Foswell disappear in the second half of the ASM sequence. The newer characters (e.g. Gwen Stacy, Captain Stacy, Harry Osborn) are more popular. This indicates that older characters are used less often as the sequence progresses

How important are Supporting Characters?

I came up with %appearances for this question. It's the number of panels containing that character in an issue divided by the total number of panels. As the character appears more, their %appearances value goes up.

Figure 1 shows the %appearances values for the top eleven characters from the two ranking lists from before.

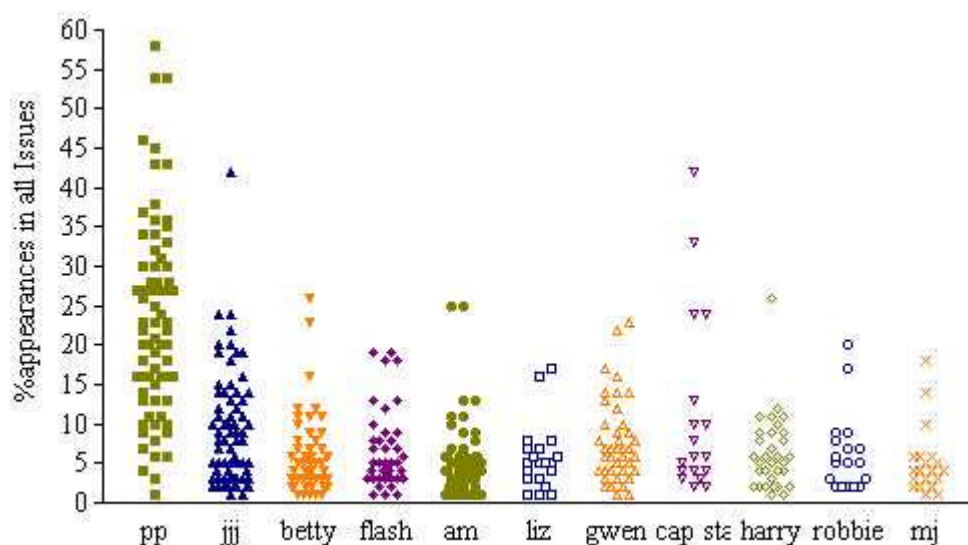


Figure 1. Top 11 Supporting Character %appearances in all issues

Figure 1 shows that even the main supporting characters (aside from Peter Parker) play a very small role in the comics. The medians of their %appearances cluster around 4-6%, which is between 4 and 6 panels in a comic containing 100 panels. This is only enough to maintain a character's visibility.

Are Supporting Characters panty-waists?

The graphs of individual supporting character's %appearances per issue show some interesting quirks. I'll summarise what I found for J Jonah Jameson, Aunt May, and Gwen Stacy.

J Jonah Jameson is the most popular supporting character (after Peter Parker). His %appearances peak every 6 issues or so, especially after Ditko's departure. A look at the outlier issues shows that JJJ is used in a variety of ways: sometimes as a proto-villain, sometimes as a hostage (#52, of the Kingpin), and as a worried father. But there's little or no character development running through his appearances.

The graph of Aunt May's %appearances per issue show that the ASM writers ran out of ideas on how to use her. There's a long period after #54 when she hardly appears. The peak in #54 has her becoming Dr. Octopus' landlady. Aunt May's most frequent role is to be worried and/or ill.

Gwen Stacy has a few high %appearances values: issue #47 sees her as the main bystander while Kraven the Hunter kidnaps Harry Osborn, issue #53 has her with Peter when Dr. Octopus steals the nullifier, and #59-61 sees her as a worried daughter while Captain Stacy is a brainwashed pawn of the Kingpin. Hardly pivotal plotting positioning.

Although ASM contains a large number of supporting characters, they aren't developed over the long-term, only having periodic importance. Supporting characters appear in almost every issue, but usually in just a few panels.

Female characters display less variety in the kinds of appearances they make. But if you want to be an onlooker to action, then Peter's the guy to date.

Is there a lot of fighting?

I use %fighting per issue, which is the number of fighting panels in an issue divided by the total number of panels. A 'fighting' panel is hard to define, since fights usually span many panels, and not every panel contains combat. For example, the hero or villain may be in retreat or hiding, or the focus can switch momentarily to bystanders (who are usually blaming everything on Spidey).

There is a fairly constant level of fighting in ASM until after #63, when large fluctuations appear. Long battles occur in #64 (with the Vulture), #67 (Mysterio), and #76-77 (the Lizard).

Statistics show that the amount of fighting does *not* change significantly over the length of the ASM sequence. On average, fighting takes up about a third of an issue, which is surprisingly low. It would be interesting to analyse issues after #81 to determine if the sporadic increases in punch-ups continue.

Fighting and Supporting Characters

The %supporting and %fighting values for an issue are complementary in some senses: as the number of panels spent on supporting characters increases, fighting decreases, and vice versa. I used this to highlight atypical issues in the sequence.

The graph which plots the ratio of %fighting / %supporting for each issue shows several very high values. A high value means that the amount of fighting is high *and* the space spent on supporting characters low.

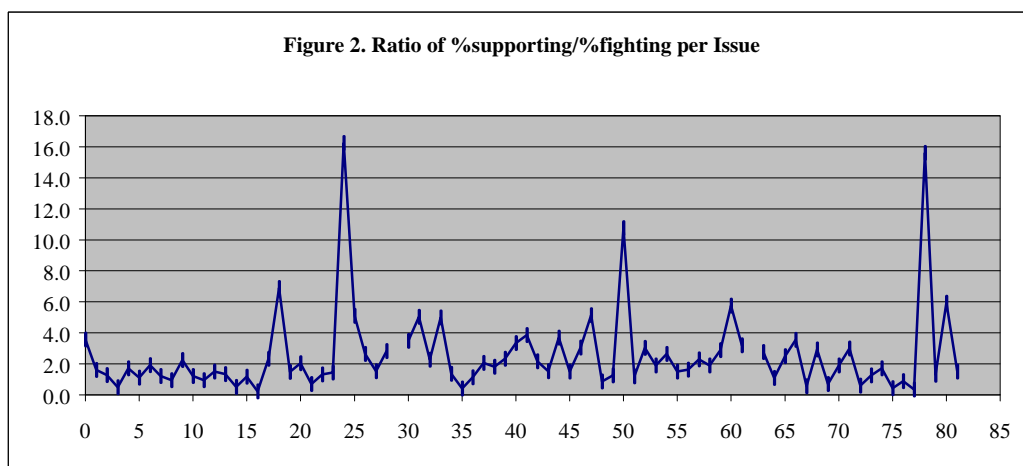
Issue numbers with a high ratio (above 1.5) are: 3, 14, 16, 35, 67, 72, 75, and 77.

#16 has Spider-man and Daredevil fighting the Ringmaster and the Circus of Crime at a visiting circus. Very few supporting characters appear, and then only in a few panels; instead time is spent on introducing Matt Murdock.

The graph shows the ratio increasing later in the sequence after #65 – an interesting trend towards more fighting and less supporting characters. It suggests a shift in the writing priorities for the comic.

The ratio can be reversed to become %supporting / %fighting, which displays peaks when the space spent on support characters is high *and* the amount of fighting low. Figure 2 shows the graph of this ratio for the sequence.

Note: #0 in this graph is AF15. Issues #1, #2 and #8 contain two stories each, but I combined their statistics to simplify the graph.



Issue numbers with a high ratio (≥ 6.0) are: 18, 24, 50, 60, 78, and 80.

These include some of the more unusual ASM issues: #18 is the issue where Spider-man avoids fighting, #24 has Mysterio in the guise of Ludwig Rinehart trying to send Spider-man insane, #50 has Peter temporarily giving up on his super-hero role, and much of the #78 is spent introducing Hobie Brown (the Prowler) and explaining his motivation for becoming a bad guy.

Summary, or "Am I a B.M.O.C yet?"

Story arcs in ASM gradually increase in length, reaching a plateau of 3 issues, with one four-issue arc which isn't repeated. The reuse of existing villains allows character development; the best example being the Green Goblin/Norman Osborn. Later in the ASM sequence, more space is given to villain motivation (e.g. The Prowler), to interactions between villains (e.g. Silvermane/Marko/Cicero), and to plot elements (e.g. the nullifier). These aspects are particularly clear from the mid #50's onwards.

The amount of fighting in ASM is surprisingly low throughout the sequence (averaging about 1/3 of an issue); ASM is not a violent comic. There are some signs that this is changing later in the sequence, with several issues containing much more fighting.

The number of supporting characters, and the space given over to them per issue, is high throughout the sequence, but there are some hints that this peaks in the mid #40's and then decreases. The number of new supporting characters drastically drops in the second half of the sequence, and many of the older characters appear less often or disappear (e.g. Flash, Betty, Aunt May, Foswell, Liz). This means that the mix of characters becomes quite static later. This is partially offset by the introduction of a range of black characters.

The large number of supporting characters tends to hide the fact that usually a character only appears briefly in an issue, which works against any long-term development of their personality. A study of the outlier issues, where supporting characters make a larger contribution, shows that they are often only onlookers to conventional hero/villain action, the exception being J Jonah Jameson. However, even his character develops very little.

This ASM sequence does not really deal with problems of the time: for example, the opportunity to consider Vietnam through Flash's character is not explored, although the possibility is there. Student activism is pseudo-addressed in "Crisis on the Campus" (#68): the problem is a safe one of low-rent dorms for students, and is resolved very quickly and without serious conflict with authority figures. The black characters allow some low-level discussion of racial issues. The famous issues concerned with drugs occur in the late #90's, after the end of my ASM collection.

The two ratios $\% \text{fighting} / \% \text{supporting}$ and $\% \text{supporting} / \% \text{fighting}$ are useful for highlighting comics with an unusual mix of fighting and supporting character appearances. For instance, the $\% \text{fighting} / \% \text{supporting}$ ratio emphasizes the increase in fighting and decrease in supporting character involvement at the end of the sequence. This may indicate a change in the writing style for the comic. The $\% \text{supporting} / \% \text{fighting}$ ratio (Figure 2) points out unusual issues, such as #18, #24, and #50, where supporting characters predominate and the amount of fighting is very low.

The Excel spreadsheet used for the analyses can be downloaded from <http://fivedots.coe.psu.ac.th/~ad/marvel/spidey.xls> (413K). If you use or extend it, please ask my permission, and acknowledge this work.