The Agatha Christie Formula

"Agatha Christie writes animated algebra."

"A Christie story goes more or less as follows" (Acocella).

"Every Christie fan will be familiar with..." (Adair).

"Each new 'Christie for Christmas' could be counted upon to be another surprising variation on the general pattern" (Bargainnier 4).

Agatha Christie's persistent adherence to her famed murder mystery "formula" is one of her most mythologized characteristics, and the sheer size of her body of work makes her consistency all the more notable. Her form has become so canonized that one perhaps needs not even have read one of her novels to be able to explain how "a Christie goes more or less as follow..."

But what exactly does "more or less" mean? To what extent does Christie genuinely follow the murder mystery pattern? Does the Christie formula *actually* exist, or is it a myth, popularized by a few of her most successful novels? In this project, I put this formula to the test by mapping the general plot of Christie's entire Hercule Poirot and Miss Marple series in search of the Agatha Christie Formula. My eventual analysis of the accumulated data focused on two key questions:

1. To what extent does Agatha Christie employ a "murder mystery formula" in her body of work? What does this formula look like?

2. What do the formula and the exceptions to the formula tell us about Christie's body of work?

The Project

Although mapping every murder mystery Christie ever wrote would have been a more thorough way to go about finding the "Christie formula," time and resource constraints forced me to limit the scope of this project to *most* of her two most popular series, the Poirot and Marple novels. In total, this amounts to forty-five novels, and of these forty-five I was able to acquire forty of them. I was unable to get copies of *Appointment with Death* (Poirot), *The Body in the Library* (Marple), *The Hollow* (Poirot), *The Clocks* (Poirot), and *After the Funeral* (Poirot).

In order to map the plot, I identified six key plot points that occur in each novel and are fundamental to the murder mystery genre; these plot points are: introduction of the detective, victim, and murderer, the murder, the gathering/explanation (when the detective gathers all the characters together to explain whodunit), and the reveal (when the identity of the murderer is revealed). By "introduction of –," I mean the first time that this character's *name* is mentioned. For each novel, I located the occurrence of all six plot points, noted the percentage of the way through the novel that they occurred, and mapped the progression of the plot based on these six points on a coordinate plane, with percentage through the novel on the *x*-axis and the six plot points on the *y*-axis. The *y*-axis points are plotted in this order: 0-detective, 1-victim, 2-murderer, 3-murder, 4-gathering, 5-reveal. I chose this order because I found that this was the most common order in which these events appeared in the text.

Throughout the many hours I spent collecting the data for each novel, there were several methodological questions and problems I came up against and are worth noting for the sake of transparency. The first is a disclaimer: I did not read all forty of these novels. Although I was careful in making sure that I identified each plot point in each novel accurately, my data is blind to textual subtlety. That is, I assume, for example, that a reveal occurs at the exact moment the detective states, "so-and-so committed the murder," and any cases in which the identity of the murderer was obvious before the official reveal, but not explicitly stated, are strictly ignored.

There are also many novels that include multiple murders, victims, and murderers. Multiple murders are the most common, but in almost every novel there is a "primary" murder that is the focus of the novel, and any subsequent murders are only meant to further the plot. Thus, the **murder** plot point is identified in these novels as the *primary* murder, and in the very few cases where there are multiple primary murders I identify the *first* murder. For obvious reasons, this also holds true for multiple victims. Similarly, for multiple murderers I either pick the murderer of the primary murder, or if there were multiple murderers of the primary murder, I identify whichever character appears first.

Finally, I provide three graphs: all of the novels together, the Poirot novels, and the Marple novels. Each graph has an average of all the data for that graph plotted in black. The graphs are attached at the end of this paper.

The Results

We can now examine the graphs and consider the questions: to what extent does Agatha Christie employ a "murder mystery formula" in her body of work? The short answer is this: a formula clearly exists, and the majority of the texts fall very closely in line with the average, so Christie actually employs this formula remarkably consistently, especially considering that this data includes forty different texts. The fact that the outliers (including *Curtain*, most obviously, but also *At Bertram's Hotel* as a **murder** outlier, *Cat Among the Pigeons* as a **detective** outlier, and *4.50 From Paddington* as a **victim** outlier) are so obviously noticeable in the graph indicates that Christie remained painstakingly consistent in the structure of her Poirot and Marple novels.

And what does this formula look like? The most obvious general trend is that the detective, victim, and murderer are for the most part introduced in the first 20% of the novel, the murder almost always occurs within the first 40%, and the gathering and reveal occur almost without exception in the final 20% of the novel. More interesting, however, is the difference between the Poirot and Marple graphs. In the Poirot graph, we can see that these percentages tighten up – the character introductions occur mostly in the first 10% of the novels and the murder in the first 30%. Marple's graph, however, is much more erratic and inconsistent regarding the murder and character introductions, but her gatherings and reveals fit very neatly in the final 10% of the novel. Certainly, Poirot's graph also features significant exceptions to the trend, but Marple's graph lacks the large collection of "conventional" novels indicated in the graph by a densely packed group of lines. For this reason, I believe that Poirot and Marple served different purposes for Agatha Christie.

Poirot was her most famous character, and the one about whom she wrote the most novels; he was famous for his precise methodology and consistent behavior, so precisely defined and consistently structured plots support the "Poirot aesthetic." None of

Marple's novels deviate wildly from anything that occurred in the Poirot novels, but

Christie seems far less concerned with establishing a formula for the Marple mystery than
she does with Poirot. The Poirot novels feature a brief exposition in which the main
characters are introduced and the murder occurs, and then the bulk of the novel is focused
on Poirot's investigation and discoveries. This is evident in the graph – the **detective**,

victim, and murderer plot points are clumped tightly at the beginning of the novel.

Marple novels, on the other hand, are much more likely to introduce the main characters
in a less consistent order and over a more drawn out portion of the novel. Perhaps

Marple's novels offered Christie more freedom to play with and develop the narrative of
the main characters, rather than focusing strictly on the investigation itself.

One question that these graphs do not answer is *why?* Why write so many novels with almost exactly the same structure? Earl F. Bargainnier explores this question in his book, *The Gentle Art of Murder: The Detective Fiction of Agatha Christie*, and his arguments relate beautifully to this project. He states:

"Christie accepts the formulas and conventions of her genre and yet is able to find seemingly numberless variations within and for them. Her genius...for taking the mystification-detection formula as developed from Poe to Conan Doyle and using it in so many works in so many ways, while finding methods of concealing repetitions and reversals of the same patterns, techniques, and devices, is remarkable" (Bargainnier 201).

Christie utilized a formula not for lack of creativity, but for the creative challenge of finding every variation within a single formula that was possible. Although her prose is not the peak of sophistication and she cannot be credited with a diverse portfolio of

characters and settings, Christie is worthy of her fame as the Queen of Crime. And after all, we're still reading her, aren't we?

Now let's consider the second question that this project aimed to answer: what do the formula and the exceptions to the formula tell us about Christie's body of work? We've already discussed general trend differences between Poirot and Marple, but there's one specific difference on which I'd like to focus more closely, and this is the end of the novel. Notice that in the Poirot graph, the line from gathering to reveal has a positive slope, but in the Marple graph, this line is vertical. What accounts for this difference? In Poirot's novels, the gathering is all about show. "All five of them sat staring at Poirot as he leaned against the mantelpiece, the glow of the fire flickering across his face. They were waiting for him to begin speaking." Some version of those sentences appears at the beginning of the final chapter in almost every single Poirot novel. Poirot gathers all the characters together with the promise of revealing the mystery, but first spends pages outlining his thought process from the beginning of the investigation in order to build up suspense, and he can do this because people will listen to him. In Marple's novels, Marple almost always must reveal the identity of the murderer before the other characters will sit down and listen to her explain her thought process. Surely, this reflects the culture in which Christie wrote – the distinguished male detective has a reputation that precedes him, and people will listen to him, but the nosy female amateur must prove herself again and again, and still no one will listen to her.

This theme – that no one will listen to the women in the story – is supported further by a couple of notable outliers for the **victim** plot point. In both *4.50 From*Paddington and Murder With Mirrors, in which the identity of the victim is not revealed

until relatively late, one of the female characters in the novel either notices or has some intuition that someone has been murdered, but because she cannot produce a body or proof that the murder has occurred, she is all but ignored until the murders are actually discovered.

The Christie formula also makes inherent points about genre that we can see apparent in the graphs. For example, consider how consistently the **reveal** occurs at the very end of the novel – this happens *without fail*. Christie's novels are always whodunits and never howtheydunits where the murderer is revealed at the beginning of the novel and the novel is spend uncovering *how* they did it. In this sense, Christie is extremely strict about genre.

Another important point about genre is revealed by one of the outliers for the **murderer** plot point. In *The Murder on the Links*, the murderer is mentioned about 25% of the way into the novel. However, this is simply the first time the murderer's *name* is mentioned; they actually appear much earlier in the novel as "the girl with the anxious eyes." This may not seem very remarkable until you consider how consistently Christie introduces the character in full – name and all – very early on in the book. There is often a red herring character, such as "the dark stranger in the shadows" or "the tall figure moving hastily from the scene of the crime," but it is very uncommon for this supposed red herring to actually be the murderer. To introduce the murderer late in the novel is to risk violating the Van Dine commandments:

Commandment 1: The reader must have equal opportunity with the detective for solving the mystery. All clues must be plainly stated and described.

Commandment 10: The culprit must turn out to be a person who has played a

more or less prominent part in the story--that is, a person with whom the reader is

familiar and in whom he takes an interest. For a writer to fasten the crime, in the final chapter, on a stranger or person who has played a wholly unimportant part in the tale, is to confess to his inability to match wits with the reader.

Thus, "the dark stranger in the shadows" is not a valid murderer, so Christie takes care to introduce her audience to each legitimate suspect. *The Murder on the Links* is one of the few novels in which the murderer *is* a mysterious stranger, but even then Christie still officially introduces the character just a quarter of the way into the text.

I'd like to note one trend that is visible in the **detective** plot point. This plot point has two main clusters of points – one cluster at the beginning of the novel from about 0-10% and one cluster about 25-40% of the way into the novel, with a gap between the two clusters. From this data, we can draw conclusions about Christie's style of writing. It seems that Christie favored two sub-formulas for developing the exposition of the non-detective characters. The more common pattern is for the detective to be introduced in the beginning of the novel and to participate in getting to know the other main characters along with the audience. The other pattern is for Christie to introduce the non-detective characters and build their back-stories before the detective comes into the novel. This relates to the trend I noted above about Marple stories having more relaxed and drawn-out expositions before the investigation begins. Interestingly, there is not a correlation between these two observations. That is, despite the fact that Marple novels have more extended expositions, Marple herself is most often introduced towards the beginning of the novel.

What conclusions can we draw from this? First, the **detective** data supports the idea that Christie enjoyed experimenting with narrative structure, sometimes writing

strict "murder-investigation-reveal" novels and sometimes taking more time to develop a back-story for her characters before committing to the investigative portion of the story. However, I speculate that the fact that Marple is included in these more drawn-out backstories, but Poirot is not, indicates that Poirot-as-character is unable to function outside of the murder-mystery narrative. He has no place in narrative development — he exists only to solve crimes. Despite previously mentioned constraints that Marple faces because of her gender, Marple actually has more flexibility in this regard — she is able to participate in narrative development without needing a crime to solve.

So, what do the formula and the exceptions to the formula tell us about Christie's body of work? They inform both the culture and time in which Christie was writing, and the constraints and rules of the murder mystery genre. They reveal Christie's personal writing style within this relatively strict genre, and they invite us to consider how large bodies of work behave in conversation and comparison with one other.

Finally – what's the big Poirot outlier (orange line)? This is *Curtain*, which is the last Poirot novel (and one of the last novels in general) that Christie wrote. In this novel, Poirot gathers a group of people together at the very beginning of the novel and claims that one of them is a murderer and that he's going to reveal who it is – a classic Poirot move. This reveal, however, is dragged out for almost the entire novel. At the end Poirot kills the murderer, then kills himself, and finally reveals all of this information to Hastings (his trusty sidekick) in a letter sent before he died. This, of course, violates one of the major Van Dine commandments: "The detective himself, or one of the official investigators, should never turn out to be the culprit." By definition of the genre, Poirot-

the-murderer could no longer go on being a detective. If Agatha Christie wanted Poirot to go out with a bang, she certainly succeeded.

Without a doubt, there are many more observations to be made and conclusions to be drawn from exploring the graph further and in different ways. Given more time, there are several additions that I would be interested to explore, including:

- Christie's work over time is there any correlation between consistency with the formula and when each novel was written?
- Exploring more specific aspects of the text there are several events that occur in lots of Christie's texts, but not all. Examples include characters moving to/living in the Middle East and murderers committing suicide. I'd like to explore how often these events actually occur, and whether they are at all related to the general formula.
- Actually reading the texts finding support for my arguments within the texts
 themselves, not just from observing the data, would lend significant credence to
 my arguments.

But for now, please enjoy my interpretation of Agatha Christie's animated algebra.

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