On the Geometry of Metafiction

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Abstract

We geometrically visualize the problem of embedding disparate storylines into a single unifying narrative.

A Narrative Puzzle and its Geometric Visualization

My three novels, *The Death of Vishnu* (2001), *The Age of Shiva* (2008) and *The City of Devi* (to appear, 2013) are disparate in setting, time period, characters and plotlines. The question I consider here is how to write a fourth novel that links them together to create a single connected work of fiction. The traditional strategy would be a new storyline that passes through the three separate narrative arcs. However, with all my previous three stories already written, trying to fit them into a new narrative (dashed curve) might make the result look particularly contrived, awkward or convoluted (see Figure 1(a)).
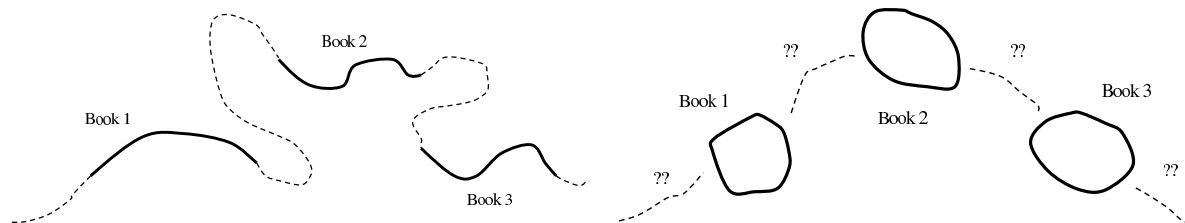

Figure 1 : (a) *Connecting story arcs*   (b) *Closed curves cannot be connected*

In a purely mathematical sense, given n smooth (C^k or C^∞) arc segments, it is of course possible to join them by a single smooth (C^k or C^∞) curve. However, constraining the length of this connecting curve may result in large derivatives in the vicinity of concatenations (corresponding to the drastic contrivances needed to fit together far-flung narratives and characters without resorting to long-winded exposition). This solution method breaks down completely if rather than open arcs, one considers closed curves (which, translated to fiction, would correspond to the previous stories being essentially self-complete). See Figure 1(b).

Of course, this mathematical problem is easily solved if one increases the dimension of the solution space by one, and allows a surface, rather than a curve, to be the connecting entity. As Figure 2 shows, one can always find a 3-d surface which intersects the plane of the paper precisely at the closed curves one would like to incorporate. (Essentially, the closed curves form the level set of this surface corresponding to $z = 0$, where z measures distance perpendicular to the paper). In fact, an infinite number of such surfaces can be found, with smoothness only limited by the smoothness of the original closed curves.

To interpret this in narrative space, we note first that in Figure 1, the observer (i.e. reader) must be external to this space, with a vantage point that enables the simultaneous viewing of the different stories. If the narrative space is modeled by the x-y plane of the paper, a natural position for the observer would be looking down from an elevated position outside this space, i.e. from a spot with $z > 0$, where the z axis is perpendicular to the paper.
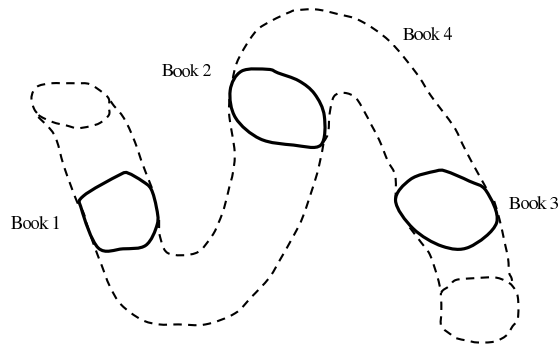
Figure 2 : *Books 1,2,3 are 2-d traces, formed by the tube (Book 4) intersecting the narrative plane*

Turning to Figure 2, we note that the dashed surface has now broken out of the narrative x-y plane to appropriate the 3-d space formerly occupied by the observer. In other words, Book 4's narrative space now subsumes the former domain (and role) of the reader. We can interpret this to mean that Book 4 now incorporates not only the stories represented by Books 1-3, but also an observer who can look down on these stories (for purposes of commentary, interpretation, and so on). This is precisely the realm of *metafiction*.[1] The actual reader has now been displaced to an exterior, four-dimensional world, from where the new three-dimensional narrative (a surface) can be observed. Moreover, this three-dimensional narrative contains a *metafictional* entity who observes the action in the two-dimensional narrative space of Books 1-3.

The above visualization has helped me figure out how to connect my three books. Instead of trying to force them into a convoluted story*line* as in Figure 1, the story*surface* shown in Figure 2 provides a more natural vehicle. Such a solution involves incorporating the previous books as actual stories of some sort, that exist on a lower-dimensional narrative level.

The mythological basis of Books 1-3 delivers a promising candidate for the metafictional element. These books alluded to Vishnu, Shiva, Devi in metaphoric form — why not now view the previous action from the heavenly plane where these deities are supposed to reside? In fact, why not bring them to life, making one of them the narrator, the omniscient observer, who has not only seen the previous stories play out on earth, but is perhaps even the orchestrator of all this action? Surely the ideal choice would be Vishnu, the mythological writer of every story, future and past, on whose shoulders rests the responsibility of operating the entire universe?

Besides Vishnu and Shiva, the usual Hindu trinity includes not Devi, the mother goddess from Book 3, but rather, Brahma, the creator. I have decided that Book 4 will explore a scenario where Devi is jealous of Brahma's traditional place in the trinity, which she feels should be rightly hers, since she has far more followers than he. To determine who gets the position, Vishnu organizes a contest between them, played out on earth in several rounds of human incarnations of the two deities. These incarnations coincide with character pairs (each engaged in some sort of quarrel) from each of the three previous books, so that the former storylines get reinterpreted in terms of this new contest (i.e. each of the three previous books is presented as a premise Vishnu has created). The new story (i.e. surface in Figure 2) will combine the action of these incarnations on earth (i.e. the closed curves), with the celestial sparring of the mythological deities. The latter will have wonderfully human characteristics — for instance, Vishnu will be fascinated by mathematics, and constantly try to prove theorems and submit them under assumed human identities to journals on earth, only to have his papers repeatedly rejected.

This, then, will be *The Trinity Quartet* — formed by Vishnu, Shiva, Devi and Brahma. The title will not only refer to the last novel, but also, self-reflexively, to the entire set of four novels.

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[1] In literary analysis, this term connotes narrative with a self-reflexive aspect: 'a story within a story' or 'fiction about fiction.'