Human Soul Theory and Machine Identity

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Turing machines are just very simple persons.<sup>1</sup> Can't we then just apply known results in Human Soul theory to puzzles about the identity of Turing machines across time? I believe that we can, and in the present paper I will argue that questions suggested by recent experimental work on the <u>split machine</u> problem can be resolved by noticing how analogous questions arising in the case of <u>split brains</u> are treated.<sup>2</sup>

What happens when we split a human brain? It is absurd to suppose that the soul undergoes a corresponding division, each half occupying one half of the split brain. Souls, like odd numbers, but unlike even numbers, are just not the sorts of things that can be halved. Now we have the following two incontestably true, but seemingly incompatible propositions:

1) Each brain-half has a complete soul.

The whole brain originally had but one.
The dilemma is formally resolved in this way:

The two halves of any brain are not <u>exactly</u> alike. One half is <u>right</u> and the other is <u>not</u>. We can always tell which half is right, viz. just the half which has more neurons.<sup>5</sup> Since the soul is the sole source of virtue, it must reside exclusively in the right half. The left half, we are told,<sup>6</sup> is the <u>sinister</u> half. Being sinister, it is deprived of virtue, and hence has no soul. But in every case of brain-splitting we can empirically detect a soul in the left half.<sup>7</sup> Where comes this extra soul? Clearly, from Twin Earth.

Twin Earth is just like Earth, except that time's direction there is reversed.<sup>8</sup> We can easily verify the following: whenever someone's brain is split on Earth, two half-brains on Twin Earth undergo fusion to form a <u>counterpart</u> to the Earth-brain.<sup>9</sup> Both Twin Earth half brains have complete souls. At the moment of fusion (<u>sub</u> specie aeternitas of course) the Twin Earth <u>right</u> half brain renders up its soul (remember, direction is reversed over there) which then migrates <u>across worlds</u> to take up residence in the newly formed Earth <u>left</u> half brain. Thus, parity is conserved.

Now we are in a position to answer the following question about Turing machines:

(Q) When a Turing machine undergoes fission, where does its machine table go?

Visualize two, parallel, two-way infinite tapes: 10 (Fig. 1) ···· SIIIIIIIII S···· TAPE

TAPE and TWIN TAPE are temporally reversed. Now suppose a machine - call him "A" - on TAPE undergoes fission at some time, each half running away in opposite directions. At the same moment, some machine - "not-A" is formed by fusion on TWIN TAPE, the result of two machine-halves colliding there. TWIN TAPE right half machine surrenders his machine table, which then migrates across the inter-tape plenum to TAPE, taking up residence in (formerly) A's left half. This is illustrated in Fig. 2.

Acknowledgment: I must thank my counterpart Dark Tie Fear at Some Souls College, Oxford, for bringing this beautiful proof to my attention.

Q.E.D.

## Notes

1. Cf. Hairy Mantupl, "Reducing the Halting Problem to the Universal

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## Solvent."

2. Viz. with discretion.

3. Down the middle, that is. Along doffed line

4. Cf. Paneful Earcrab, "What numbers is."

5. See - the numbers do count!

6. N.b. this is an application of ordinary language analysis.

7. Viz. just ask it.

8. We can verify this by the device of Feignman diagrams.

9. Cf. Laws Divide, "Counterpart Theory and Motel Logic."

10. By the parallel postulate, TAPE and TWIN TAPE are in pre-established harmony.