Witchknots, Knitwits and Knots Intrinsicate

Steven Connor

A text written to accompany Ravelling, Unravelling, an exhibition of work by Naheed Raza exploring the theme of entanglement in medicine, art, literature and philosophy, Royal Institution, London, 13-28 May 2009.

Knots have two strongly contrasting aspects that are, as we might say, knottily intertwined. First of all, and perhaps primarily, the knot is the embodiment of constancy or coherence, of that which holds or binds together against the erosions and mutability of time. Knots are stays against time and forgetfulness. They image the taking up of a stitch in time. Maritime knots are a measure of time projected into space; the number of knots at which a ship is travelling is the number of nautical miles (minutes of the earth's longitude at the equator) a ship is covering per hour. Even more than speech, accounting and mathematical procedures seem to depend upon knots, most systematically in the quipu system which flourished under the Incas and remained in use, or at least intelligible in parts of Peru until late into the twentieth century. In the quipu, knots are made in a series of coloured cords to record information: this certainly seems to have functioned as a method of mathematical notation and perhaps as a calculation aid too, and some scholars suspect that the knots also encoded much more complex forms of narrative and historical record and thus constituted something like a writing system (Urton 1998).

Knots were thought to encourage the knitting together of wounds. Pliny the Elder reported on the wonderful healing powers in particular of the Hercules knot or 'nodus Herculanus', an expression used by classical authors to refer to a riddle or logical puzzle that was extremely hard to construe. I give his description in Philemon Holland's translation:

As for greene wounds, it is wonderfull how soon they will be healed, in case they be bound up and tied with a Hercules knot [marginal note: Wherein no ends are to be seene, they are so close couched, & therefore hardly to be unloosed]: and verily it is thought, that to knit our girdles which we weare about us every day with such a knot, hath a great vertue in it, by reason that Hercules first devised the same. (Pliny 1634, 2.305) It may seem odd for knots also to feature in magical remedies where their function may be to ease, or to diffuse pain – for example, in the use of a snakeskin knotted nine times and worn for nine days round the wrist as a charm against rheumatism (Speck 1941, 56). Presumably in this case the function of the knot is to confirm that the power of the remedy continues to be held and concentrated in the curative or prophylactic object, even as it is given out as a kind of unloosing.

There are many examples of knots being used as amulets, to preserve health or fortune, one of the most notable being the *tyet*, or knot of Isis, a three-looped knot which seems to suggest a human figure, and the related ideograph of the ankh. It is easy to imagine the origins of beliefs in the magical efficacy of typing, given the obvious, yet still always miraculous strength and efficacy of knots, in sailing, engineering, weaving and mechanical operations of all kinds. The Egyptian Hedihotep was the god both of weaving and amulets, and knotted cords were known as 'Anubis threads', since Anubis presided over the practice of wrapping the corpse in mummification, the ultimate form of bodily preservation against the dissolutions of time (Pinch 1994, 108). Indeed, the use of knots in spells may well condition the sense of the magical power of writing itself, which is concentrated in its own loopings, and power to turn time back on itself. The knot embodies the most extreme magic of all, namely reversibility, in a temporal world in which in reality nothing ever remains in its place or comes back. In a knot, the top and the bottom, the left and the right change places.

Knottings and crossings feature frequently in heraldry, and survive in badges or emblems of affiliation of many kinds, of companies, guilds and clubs, as well as in ceremonial ties, garters and cravats, all of which signify the close-knit continuity and the unity-in-multitude of the association. Such images or sigla, which are often worn on the body, might actually double and fold back into it a kind of primary magic found in certain parts of the body itself. It has been suggested, for example, that the use of knot amulets in Egyptian magic had a primary reference to the vertebra, as suggested by the ideograph *ts*, which signifies both knot and vertebra, since the vertebrae may be thought of as 'a series of bony ligatures, links, or connected segments comprising the spine, that is, they are the series of "knots" that tie the whole skeleton together' (Gordon and Schwabe 2004, 101).

It is in Kabbalistic mysticism that the body-magic of graphic forms is most extensively developed, for example, in reflections on the mystical form of the letter *bet* which begins the Torah, since, as Rabbi Isaac writes in the *Zohar*, the

Kabbalistic commentary on the Torah, 'Torah is entirely the one supernal holy name. And since it is the holy name, it begins with *bet*, for it is the totality of the holy name in three knots of faith' (*Zohar* 3.36a). Knots have a particular centrality in Hebrew religion because of the *tallith*, the prayer shawl, with its eight tassels, each tied with five knots; this adds up to 13, which, added in turn to the number 600, the numerical value in the *gematria* system of the word *tzitzit* (the collective term for the eight tassels) makes 613, the total number of precepts in the Torah (Hastings 2004, 2.69, Gutmann 1983, 16). Thus, whelmed in the *tallith*, the observant Jew is bound into the entire body of the Law. But, if the law is bound up in the form of a knot, there must also be a law that is binding on knots themselves. The Babylonian Talmud contains a chapter explaining in what circumstances one many tie or untie a knot on the Sabbath – according to Rabbi Meir, '[o]ne does not become culpable for any knots that can be untied with one hand' (Rodkinson 1903, 2.230) – as though what were feared were the mimetic knotting of the body involved in the tying of knots.

The power of the knot to countermand time can also take malign forms. A knot is among the most reversible of the magical powers of reversal. Frazer records that a parliament in Bordeaux sentenced some one to be burned alive for bringing systematic ruin to a whole family by means of magical knotted cords (Frazer 1998, 290). There is a tradition in some commentaries on the Koran that the prophet Mohamed was bewitched by a Jewish magician, who tied nine knots in a cord and hid it in a well. It was only when the Angel Gabriel revealed the whereabouts of the cord, and incantations were said over it to cause the knots to loosen, that the Prophet recovered from his sickness.

The ambivalence of the knot is nowhere more manifest than in the sphere of love and sexual association. Tying the knot is, of course a powerful image and metaphorical guarantee of fidelity in love, as is witnessed in the many forms of the true-lover's knot, often woven from hair, which lovers have given to each other as pledges, and in traditions of the intertwining of the red rose and briar springing from the graves of sweethearts, as in the folk song 'Barbara Allen'. In marriage, the *not* of the 'virgin knot' is undone by the 'knotting' that, in popular parlance, once meant copulation (Farmer and Henley 1890-6, 4.130), even as marriage itself can be thought of as a less congenial kind of bondage, as in the popular description of a wedding as 'tying a knot with the tongue that cannot be untied with the teeth' (Farmer and Henley 1890-6, 4.130). For this reason, knots have a central place in many marriage and betrothal ceremonies. But knots, which ought to turn the couple inwards on themselves, can also come between them when others intervene, inhibiting their congress, or preventing its issue. Touching the bridegroom with a handkerchief and then tying a knot in

it is one way to go about preventing consummation. Witch's knots were believed to be used for the purpose of creating impotence or barrenness. James I singles out as examples of 'such kinde of Charmes as commonlie dafte wives uses' the practice of 'staying maried folkes, to have naturallie adoe with other, (by knitting so manie knottes upon a poynt at the time of their mariage)' (James I 1597, 11, 12). In the ballad Willie's Lady (Child no. 6), a jealous mother casts a spell on her son's new bride that prevents her not from conceiving but from giving birth to her child. The spell is eventually discovered when her son fashions a simulacral child out of a loaf of wax and invites the mother to the christening. When he hears her raging 'Who was it who undid the nine witchknots/Woven in among this lady's locks?/And who was it who took out the combs of care/Braided in amongst this lady's hair?' he immediately performs the required operations, and his wife is given her relief (Child 1965, I.83-5). In Ovid's rendering of Alcmena's account of the birth of Hercules, her son by Jupiter, all that is required to hold back parturition is for Lucina, the goddess of childbirth sent by a jealous Juno, to sit with her arms and legs crossed, muttering charms:

As she listened to my groans, she squatted on her altar before the door, and with right knee crossed over left and fingers interlinked in her lap she suspended the birth; quietly she muttered incantations, which held up my deliverance (*Utque meos audit gemitus, subsedit in illa/ante fores ara dextroque a poplite laevum/pressa genu digitis inter se pectine iunctis/sustinuit partus. Tacita quoque carmina voce/dixit, et inceptos tenuerunt carmina partus*). (Ovid, Metamorphoses, 9.297-302)

For this reason, just as wedding ceremonies in different cultures often require the couple to leave buttons undone and shoes unlaced, there are also many beliefs and practices involving the systematic unloosing of knots or the prohibition of braiding, or crossing of legs, at a time of childbirth. These anxieties and prophylactic practices extend to other times of life-passage, as well, including death. J.G. Frazer provides the rationale for this in homeopathic principles: 'Whether you cross threads in tying a knot, or only cross your legs in sitting at your ease, you are equally, on the principles of homeopathic magic, crossing or thwarting the free course of things, and your action cannot but check or impede whatever may be going forward in your neighbourhood' (Frazer 1996, 289). The principle that like affects like, no matter what spatial distance may intervene between the objects bound together, has an odd parallel in the principle of 'quantum entanglement', or the theory that two particles may be able to affect each other even though they are separated. In objecting to this

5

idea as 'spukhafte Fernwirkung' or spooky action-at-a-distance, Einstein saw the link with magical thinking clearly. The knot implicates the far in the ear and the near in the far. We may say therefore, that the very theory of the way in which knots have magical effect involve the conception of a further knotting or implicature.

A knot is the magical image of time turned upon itself. There is an important difference between a knot and a mere loop, bow or circle. For these latter merely mark or suspend time, open up a nook or epoch in time, a passage of time in which time can appear not to pass. But a knot does not merely suspend the onward pressure of time, but rather turns it against or back into itself. A loop slackens the tension of ongoing time, but a knot makes that tension strive against itself, so that, the more one pulls on the two sides of a knot, the tighter it gets, time coagulating into space and space becoming ever more charged with time.

For this reason, knots can also keep time open, by storing up possibility. In this respect, knots are as it were, concretions and concentrations of aperture, holding time proleptically in store, or holding it back from itself. An interesting knot practice is recorded among the Southern African Nandi people; a traveller starting a journey will make a knot in some grass by the side of the road, in the hope thereby of preventing those he is going to visit from having their meal before he arrives, or at least of ensuring that there will be food left over (Garbutt 1909, 532). Probably this is why the tying together of the loose ends at the end of a narrative is also called a *dénouement*, or unknotting – for once the knot has been slackened, nothing more can happen. A knot is a prevarication, a provocation and a promise of more to come, of *l'avenir*. John Scheffer reported that in his History of Lapland that Finnish sorcerers 'sell winds to those Merchants that trafic with them, when they are at any time detained by a contrary one. The manner is thus, they deliver a small rope with three knots upon it, with this caution, that when they loose the first, they shall have a good wind, if the second a stronger, if the third, such a storm will arise, that they can neither see how to direct the ship, and avoid rocks, or so much as stand upon the decks, or handle the tackling' (Scheffer 1674, 58). Knots could also be used for divination purposes, presumably on the principle that they knitted together the present and the future that were normally held apart from each other. One such procedure was recorded in the early nineteenth century: Whenever I go to lye in a strange bed, I always tye my Garter nine times round the bed-post, and knit nine Knots in it, and say to myself: "This Knot I knit, this Knot I tye, to see my Love as he goes by, in his apparel'd array, as he walks in every day"' (Brand 1813, 2.41). In Papua New Guinea, knot magic is used to conduct transactions with the dead, and indeed with one's own death. A grieving relative who wishes to have their death hastened will tie some knots in a leaf and throw it to the *yambukei* egret, hoping that it will fly to the land of the dead, who will come in a canoe in the appointed number of days to fetch the spirit of the supplicant (Harrison 2001, 261).

These two meanings, the conservation from time, and the constraining of time, do not neutrally cohabit in the knot. Rather, they engender and impact on each other. The knot concentrates a power of unloosing, disperses a power of retention. The knot is a figure for the logical difficulty of paradox not because it simply makes it plain or lays it open to view, but because it is itself paradoxical and self-confuting. A knot is a figure that pretends to let us think all in one go the idea of a configuration that cannot ever quite pull itself together or apart. The knot is implicated in what it signifies.

The knot is the image of life itself, with man as the anastomosis of spirit and body, in which, as in John Donne's 'The Ecstasy', is 'knit/That subtle knot, which makes us man' (Donne 1996, 55). The dissolution of death is the untying of that knot. Pressing the snake to her bosom, Cleopatra demands With thy sharp teeth this knot intrinsicate/Of life at once untie' (V.2, 303-4; Shakespeare 1995, 296). But knots also stand for the impediment of complication, and therefore for secrecy, conspiracy and a kind of perverse proliferation (indeed, the motivation to Cleopatra to seize the writhing asp is that she thinks that if Octavia 'first meet the curled Antony/He'll make demand of her, and spend that kiss/Which is my heaven to have' (V.2, 300-2; Shakespeare 1995, 296), where curling may refer both to Antony's coiffure and his coiling betraval). Discovering the plot against him, Ford in The Merry Wives of Windsor howls 'there's a knot, a ging, a pack, a conspiracy against me' (IV.2, 108-9; Shakespeare 1979, 111). Conspiracies are presumably thought of as knots because they are paradoxically fissiparous fusings, conjunctive dissensions, with no basis but their own compacity. Othello thinks with horror of the fountain of his love for Desdemona turned to 'a cistern for foul toads/To knot and gender in' (IV.2, 62-3).

The modern mathematics of knots arises from a similarly self-propagating convolution of next-to-nothingness. Watching his colleague P.G. Tait perform experiments with a device for producing smoke rings, William Thomson proposed in 1867 that the basic constituents of matter might be nothing more than vortices or convolutions in the ether, that ultra-attenuated medium of universal transmission in which occult and scientific traditions come together. Though it has a distant descendant in modern string theory, the theory of 'vortex-atoms', and 'ether-knots' was soon abandoned, but not before it had set in train the still prospering form of mathematics known as knot theory. In a sense, the power of the knot is precisely that it images the empty self-relation of that which comes into being in turning or reflecting on itself, and is thus twin to the self-conjuring *cogito*. Made of nothing but the intrication of their own dissilience, knots thread us through and together with our space and time.

References

Brand, John (1813). Observations on Popular Antiquities: Chiefly Illustrating the Origin of Our Vulgar Customs, Ceremonies and Superstitions. 2 Vols. London: F. C. and D. Rivington, etc.

Child, Francis James, ed. (1965). *The English and Scottish Popular Ballads*. 5 Vols. New York: Dover.

Donne, John (1996). *The Complete English Poems*. Ed. A.J. Smith. London: Penguin.

Farmer, John S. and W.E. Henley, eds (1890-6). *Slang and Its Analogues Past and Present.* 4 Vols. London: printed for subscribers.

Frazer, J.G. (1998). The Golden Bough: Abridged Edition. London: Penguin.

Garbutt, H.W. (1909). 'Native Witchcraft and Superstition in South Africa.' *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 39, 530-558.

Speck, Frank G. (1941). 'A List of Plant Curatives Obtained From the Houma Indians of Louisiana.' *Primitive Man*, 14, 49-73.

Gordon, Andrew H. and Calvin W. Schwabe (2004). The Quick and the Dead: Biomedical Theory in Ancient Egypt. Leiden: Brill/Styx

Harrison, Simon (2001). 'Smoke Rising from the Villages of the Dead: Seasonal Patterns of Mood in a Papua New Guinea Society.' *Journal of the Royal Anthropological Institute*, 7, 257-274.

Hastings, James, ed. (2004). *A Dictionary of the Bible*. 10 Vols. Honolulu: University Press of the Pacific

James I, of England (1597). *Daemonologie In Forme of a Dialogue, Divided Into Three Bookes*. Edinburgh: Robert Waldegrave.

Pinch, Geraldine (1994). Magic in Ancient Egypt. London: British Museum Press.

Pliny, the Elder (1634). *The Historie of the World: Commonly Called, The Naturall Historie of C. Plinius Secundus*, trans. Philémon Holland, 2 Vols. London: Adam Islip

Rodkinson, L. Michael, ed. (1903). *The Babylonian Talmud*. 2 Vols. Boston: New Talmud Publishing Co.

Scheffer, John (1674). The History of Lapland Wherein Are Shewed the Original, Manners, Habits, Marriages, Conjurations, &c. of That People. Oxford: George West.

Shakespeare, William (1979). *The Merry Wives of Windsor*. Ed. H.J. Oliver. London and New York: Methuen.

----- (1995). Antony and Cleopatra. Ed. John Wilders. London and New York: Routledge.

Speck, Frank G. (1941). 'A List of Plant Curatives Obtained From the Houma Indians of Louisiana.' *Primitive Man*, 14, 49-73.

Thomson, William (1867). 'On Vortex Atoms.' Philosophical Magazine, 34, 15-24.

Urton, Gary (1998). 'From Knots to Narratives: Reconstructing the Art of Historical Record Keeping in the Andes from Spanish Transcriptions of Inka Khipus.' *Ethnohistory*, 45, 409-438.