



DA VINCI CREATIVITY



The Maestro. Renaissance Man. Lenny on the Block. However he is known, and he's never known as the latter, Leonardo da Vinci is undoubtedly one of the most creative thinkers of all time... But what connects a dirty mark on his wall with the Rorschach ink blots and this 'Doodle'*? And how can it possibly help you? Lay on, Macduff...

Take a leaf out of Leonardo's book: In this information rich, technology rife age, could it be that some of today's best advice on creativity was already old hat to Leonardo in the 14th Century? In 'The Creative Habit' – a talk that DMIer Deej gives to help people develop their creative skills – Da Vinci is cited as a fantastic proponent of 'Notebooking'. In fact, Deej goes so far as to say that if you were to do only one thing to boost your creativity, it would be to start keeping a notebook...

So Da Vinci jotted stuff down, did he? Indeed, although that scarcely does it justice... Whilst only a small number of them survive, it is believed Leonardo's notebooks ran to a total of somewhere between fourteen and twenty thousand pages... But what was in them?

Glad you asked! They contained fables, riddles, jokes, sketches, mirror writing, puzzles; designs for stages, costumes, weapons, furnishings, flying machines... Notes on anatomy, botany, architecture, engineering, geography, cartography, geology, painting, sculpture, music, astronomy and physics... And questions – yes, questions – about most of these subjects, too...

There are more questions than answers: Do you know what happens when the mind is given a question? You can think of it as a little bit like programming a computer with a problem to solve! Faced with questions that intrigue, your mind becomes curious and begins looking – no matter how subtly – for connections and answers! So asking questions is a key skill in creativity; one that Leonardo habitually used or, as he put it:

"I roamed the countryside searching for answers to things I did not understand. Why thunder lasts longer than that which causes it, and why immediately on its creation the lightning becomes visible to the eye while thunder requires time to travel. How the various circles of water form around the spot which has been struck by a stone and why a bird sustains itself in the air. These questions and other strange phenomena engaged my thought throughout my life..."

Da Vinci's constant question asking and note taking were both a cause and effect of his insatiable curiosity. This curiosity – a desire to understand, investigate and learn – is one of the keystones of creativity and results in the development of a fertile mind.

But curiosity killed the cat! So they say, but faced with such a trite thought, the creative mind might immediately ask: which cat? Where does the proverb come from? Do cats really land on their feet? If not, when don't they? How do cats' claws retract? Why do people say cats have nine lives? Wasn't Curiosity Killed The Cat a pop group?!**



We say these things facetiously so that it's easier to see how many more avenues of thought open up with a questioning, challenging mindset... And it's a skill of habit, one that is enabled, enriched and encouraged for the price of a notebook! Here are the reasons why it works...

Well, first the easy one: You remember more ideas when you write them down... Simple as that! Second, many scientists believe writing things down helps process thoughts as a 'whole brain' activity – that is to say it involves both the logical and creative parts of the brain... So you're not only more likely to remember ideas, you're also more likely to improve the quality of their processing, too. The final reason that keeping a notebook helps produce more ideas is the most subtle: the more ideas you have, write down and act upon, the more the brain understands that creativity is valued – and the more it creates!

One last thought on notebooking involves remembering that the entire human experience is represented to us through our senses and perceptions... Ideas and questions certainly belong in your notebook, but so do incomplete thoughts, dreams, images, sensations, observations, feelings and even notes on seemingly meaningless things that are just a little out of the ordinary!

The thigh bone's connected to the back bone: Leonardo da Vinci's work encompasses a rare blend of art & science, and what he learned in one sphere he often applied in another... He willfully connected principles and ideas that appeared unrelated. His design for a magnificent spiral staircase at the King of France's château, for example, was inspired by the patterns on seashells and conches he'd collected years before. Similarly, a musical instrument Leonardo designed was largely based on his earlier study of the human larynx...

There's an old joke in which a fella says to his friend, "Do you believe in coincidence?". The friend says: "That's funny – I was about to ask you that..." We mention it because the above examples of how a mind can connect one seemingly irrelevant idea with another are often dismissed as too dependent on luck to be useful as a tool. We completely disagree! The intention behind most creative techniques is to find ways to stimulate new connections... Far from being casual 'luck', the deliberate and habitual connection of disparate elements is one of the most reliable ways to become more creative.

You can try a technique that helps emulate Leonardo's 'connected thinking' right now! Think of a problem, challenge or brief that you're working on... Now look at the five words below and see how many ways you can connect each word to your problem. Spend plenty of time on each!

Picture Umbrella Hoop Balloon Tree

How can this possibly be useful in the real world? Well, we'll give you a recent example: even as we were putting this Info Sheet together, we realized we'd run out of ribbon whilst still needing to attach a label to a gift in a hurry... We looked at the list of words here and pondered on how they might help...



The word 'Umbrella' called to mind the hook shape that they often have for a handle... This in turn suggested those plastic monkeys that link together in a 'Barrel full of Monkeys'! Well, perhaps surprisingly, we didn't have a Barrel full of Monkeys to hand anymore than we had a spool full of ribbon... Nevertheless, we rather like the idea of those toys holding a gift label, so will probably make some up in the future.

That didn't actually solve our problem, though, so we moved on to the word 'Hoop'... Among other things, this conjured the image of using a metal split ring – a key ring, if you like – as a sort of paperclip... Happily, this thought caused Stu to remember that he did, in fact, have some novelty paperclips – in the shape of a 'thumbs-up' – squirreled away in his desk drawer! This is what we used to attach the label and, as is so often the case, this looked rather better than the ribbon would have anyway!

Think inside the box: We first heard this technique called by the rather ugly names of a 'Morphological Matrix' and a 'Thrash Chart'; it turns out, though, that it's also known as 'Leonardo's Idea Box'. In any case, it's terrifically useful, especially if you have only the vaguest sense of direction! It will almost effortlessly produce more ideas in five minutes than many people will come up in a week of 'regular thinking'!

Let's imagine that you want to come up with a concept for a new television show – and that's all the info you've got! To get underway, you'd give a little thought to some attributes of TV shows. These attributes might include 'Setting', 'Genre' and 'Character' for example, so you'd write these attributes above the columns, as below...

Morphological Matrix - TV show, attributes:

Attribute:	Setting	Genre	Character
Item 1			
Item 2			
Item 3			
Item 4			
Item 5			
Item 6			
Item 7			
Item 8			
Item 9			
Item 10			

Next, write down as many things that fit under each attribute as you can think of... We've used ten for the examples that follow; these will be our 'items'. In the TV example, the items include 'Science Fiction' and 'Westerns' under 'Genres' while 'On a ship', 'In the desert' and 'Underground' are among the 'Settings'. Make a list of such items under each of the attributes.



Morphological Matrix - TV show:

Attribute:	Setting	Genre	Character
Item 1	Office	Fly on the wall	Magician
Item 2	Wild West	Comedy	Un-PC
Item 3	Petrol station	Period piece	Naive
Item 4	Outer space	Animation	Clumsy
Item 5	Farm	Documentary	Henpecked
Item 6	Theme park	"Revealed!"	Upstanding
Item 7	House	Invest. journo	Grumpy
Item 8	Church	Sci-fi	Pedant
Item 9	Police station	Soap opera	"Precious"
Item 10	Leisure centre	Variety show	Animal

Perhaps you can already see how this is useful! Immediately you fill in the columns, you're generating a mass of options, each of which can be explored. And to be completely clear about the examples, you're not simply generating thirty possible combinations by making a grid 3 X 10 – you're generating 1,000 possibilities... It's 10 X 10 X 10 because you can mix and match against the columns! Indeed, adding just one more 'attributes' column takes the potential combination total up to 10,000!

Will they all win a BAFTA? No, not by a long shot! In the TV show example, for instance, it's reasonable to assume many of them will be impractical or have been done before: a comedy show, set in an office around an 'Un-PC' character has achieved a phenomenal success already, as has a Police 'period piece' with an 'upstanding' central character... At the time of writing, though, there's not been a fly-on-the-wall show focusing on a pedantic employee in a theme park!

That's not to say we think this is a particularly good idea... Rather, it illustrates how Da Vinci's Idea Box quickly generates a vast number of possibilities. The analysis of whether these ideas have merit belongs in a process outside the scope of this particular Info Sheet.

Just for reference, we've also included a DMI activity 'grid' which allowed us to think up dozens of potential social activities: for one, we could watch the nail-biting horror fest 'The Descent' the night before we then explored some caves ourselves! This activity now appears on our 'to do' list because we particularly liked it; it might just have easily been the case that we watched 'Touching the Void' before climbing Snowdon, though, or went camping in the Dales in a tent we made ourselves, or built a raft together to sail round an island on the Thames...



Morphological Matrix - DMI activity:

Attribute:	Activity	Location	Challenge
Item 1	Walk	Mountains	Fast as...
Item 2	Climb	River	Endure (time)
Item 3	Bungee jump	Dales	Physical endurance
Item 4	Drive	On the coast	Tied together
Item 5	Sail	Abroad	Test nerves
Item 6	Cycle	Underground	After unsuitable film
Item 7	Explore	At sea	Make something
Item 8	Parachute	In a desert	Solve something
Item 9	Race	Town Centre	Creative act
Item 10	Camping	Private land	Find

This technique is by no means a one-size-fits-all tool. Nevertheless, many people recognize it as one of the fastest and most versatile ways with which to create ideas... Give it a go; you may never look back!

Morphological Matrix - Blank:

Attribute:			
Item 1			
Item 2			
Item 3			
Item 4			
Item 5			
Item 6			
Item 7			
Item 8			
Item 9			
Item 10			

What is the meaning of this? Earlier, we asked what connects a dirty mark on Leonardo da Vinci's wall with a doodle/riddle and the Rorschach ink blots. The answer is that they are all abstract forms to which meaning was knowingly ascribed... The act of assigning meaning to the ostensibly meaningless was a creative technique much used by Leonardo. In his own words, albeit translated, he encouraged people to:

"...look upon an old wall covered with dirt, or the odd appearance of some streaked stones. You may discover several things like landscapes, battles, clouds, uncommon attitudes, humorous faces, draperies..."



Da Vinci felt that this was an excellent method for "...opening the mind and putting it upon the scent of new thoughts". Countless people have subsequently mulled on an issue, then spent their time staring at clouds, or swirls of milk diffusing in a cuppa; the crinkles in a sweet wrapper, the crannies of tree bark, the tendrils of uprooted plants and the dancing of shadows on a wall... All in the belief that ideas will follow – and follow they do!

If you plan to give this a try, find a pattern, random mark, texture, surface or shape and simply look at it... Just look and let your mind wander. Take your time: the impatient tend to go at it with the idea that it's about making all the dots join up right away; they get somewhat despondent if that doesn't happen... See it more as putting dots in a blank book in the hope that they will connect eventually!

Ok! We must crack on; we have pictures to make and dirty marks to look at, just as surely as others have marks to make and dirty pictures to look at! If you'd like to know more about Leonardo da Vinci – 'The Great Bard', as he is also not known – you absolutely must check out 'How to think like Leonardo da Vinci' by Michael Gerb. Also, you absolutely must chuck out 'The Da Vinci Code' by Dan Brown. Finally, to learn more about The Creative Habit, telephone DeeJ on 01784 42 12 12.

* This is a replication of 'Blind Beggar behind a Street Corner' by Agostino Carracci (1557-1602); one of the earliest 'Doodle/Riddles', or 'Droodles'.

**Research shows that, from the time of Shakespeare's 'Much Ado About Nothing' (around 1599) until at least 300 years later, the phrase was actually 'Care killed the cat'... Now, aren't you in the least bit curious as to why that changed?

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