



The *Tarot de Marseille* deck (here, the Grimaud edition from 1930) provides an excellent occasion to study math as fiction: that is, with the inherent ability to attract and be marked by reality. Above: montage with the Major Arcana in a *Fibonacci*-sequence, concluding with a top row of 4 cards, with the *sum* of 78 (which is the number of the *entire* deck, including the Minor Arcana). The top row is a key featuring the sequence: *same, similar, different* and *other*.

The earliest known existence of the Marseille Tarot deck goes back to the 15th century: the Camoin-Jodorowsky reconstruction refers to a model from 1471, in industrial print from 1997. While the Grimaud editions refers to a model from 1748, in industrial print from 1930. The ones in circulation during my life-time, the Grimaud copies were the ones featuring in modern times. The salient feature of the Marseille Deck is the reference to *playing-card functions*, which is known to have been popular in the 17th and 18th century. *These* are like smokes: Gauloises or Gitanes.

This background is likely to explain my predilection for the mini-format of Tarot: 4 X 7,5 cm for the Grimaud; 4,1 X 7,6 cm for the Camoin-Jodorowsky deck. Simply because they are fit for playing on a café table, and not fit for the grand gestures of divination. Which again has to do with the connection between [card-games](#) with modern chance methods, and its looser/hypothetical connection to grand ideas such as fate (that are found in divination). In the linked French Tarot card game the number of players are 4, who receive 18 cards each.



The key—*same, similar, different* and *other*—applies at many levels, for instance the orientation of the left/right orientation of the bodies, but there is also the placing of text, the attire and the accessories. Non-binary code.

There is a connection between the game and the design and structure of the card-deck itself. The column to the left in the photo-montage above is built from the *Fibonacci* sequence: 1-1-2-3-5-8. Starting with a *trump* (the Fool, or excuse) adding 1, which is 2 cards, hence adding the II. This procedure is a way of making *the count* of 2 correspond with the *gesture* of laying out 2 cards (incidentally corresponding with the II in the deck). In the next column 3 cards are laid out, then 5 and then 8. Ending with card XVIII.

Removing the trump/excuse, the count now is the same as the 18-hand in the French Tarot-game. But the cards considered so far are the ones of the Major Arcana, which in the game are all used as trumps. Adding the 3 remaining cards to the end-XVIII of the *Fibonacci build* above, we can make two observations. The four concluding cards—XVIII, XVIII, XX and XXI— a) have a sum of LXXVIII, or 78, which is the total number of cards in the deck (Major and Minor arcana together); b) they contain a pattern: same, similar, different and other. Which is a key in the Major to the Minor Arcana.

If you look at the top row with the *Valet* (Eng. Page), the two first have hats and are have slight orientation to the right: *same* and *similar* (in the suits of pentacles and swords). The next in the line is *different*: the *Valet* has the cap—not a hat—in his hand, and the right orientation is more pronounced (suit: cups). Finally, the *Valet* in the rods-suit is oriented to the left and is wearing a cap: he is *off* or other in the lineup

of 4. This repeats with the knight-, queen- and king-rows below (old Fr. *Cavalier, Reyne, Roy*), but not in the same suits: so it is serial but non-repetitious. This of interest since it shows how models —as non-repetitive seriality— can be *coded*. The deck is made up of more than one paradigm.

Which means that *empirical* systems—of which this card-deck is a case in point—have been coded according to the 3rd way between abstraction and conceptualise explored by Julia Robinson (2009) on Fluxus, is historically much older and *not* a modern invention. The question of how one can have a series if it is not repetitious, is simply: if repetitive in one paradigm, there will be variation in another paradigm. So, a model (according to Robinson's definition) is a series without being in all aspects repetitious, and it is non-repetitious because it contains aspects of variation.

If the model is systematic—in ways that can be showed (as above)—it is *not* closed, which means that it includes a crossover *between* different paradigms, such that when *one* system of same, similar, different and other is established, there are *others* crossing it which appear to be random. However, then these are lined up accordingly (same, similar, different and other) the ones previously studied will now appear to be random. Hence the card-deck, pervasively built/developed, in this way will invite speculation on the relation between chance and providence.

Because we cannot make out whether it is the one or the other it will attract and be marked by real events, which is why it is relevant to Roman Jakobson's theory of *shifters* (which Julia Robinson quotes from Rosalind Krauss' *Notes on the index*): "The shifter is Jakobson's term for that category of linguistic sign which is 'filled with signification' only because it is 'empty,'" Which is how and why *events* can be significant. Which means that a deck can phase in with the random elements of life and make them significant, because they are *also* contained by the deck.

They *reverberate* the events that we either *attract* or are *marked* by. Which is why the structure of the card-deck—by its design—is *fictional*: a penchant which is likely more pronounced in the card-game than in divination (which is more like a world unto itself, which contains its own reality [i.e. it is *illusory* rather than fictional]). So, the question then is whether we can consider the deck independently from the game, or whether we may want to include the *game* into our notion of the *design*. This question is inspired by an MA student at KHIO at this time: Nicolas Antoine Vittori.

He has a certain number of questions around interaction and illustration—featuring the act of drawing itself—which I transpose like this: if the cards are the food, then the game is our kitchen. The game will likely leave a trace on the way the cards are made. That is, the cards have evolved from gaming, rather than the other way round (like someone invented a clever and infinitely complex game and then people began to play). With Cartomancie it is the *oracle* speaking, so then it is the cleverness of the design reduced to the cards that prevails. Hence some questions.

Can we assume that the relation between pure- and applied math is essentially different? First, the tendency of making new empirical discovery in the light of the coming into existence of new math. That is, the knack of *attracting* events (which, of course, does not mean that the events are not real). On the other hand, the knack of being marked by them: as when successfully applied.

Then there is the difference between pure and applied math. There is a joke about this: during an interview a known mathematician is asked—*what is the difference between pure and applied math?* Her answer: "there is no difference: in fact, they have nothing in common whatsoever."

So, they do not even have difference in common. We could continue and ask: do they have *nothing* in common? In the light of the foregoing, I am not sure whether applied math has nothing. Since, whenever things are not the same they will be similar, different, other. In the sense that the four-square group considered in this handout (same, similar, different and other) is what is cooking in the assignments of application, when *nothing* is assumed (and differently so, by pure and applied math). It is similar to the maize paper used on old working-class cigarettes: they would burn only when smoked, while going out when they were not. Saves money.

It is likely a tall order to compare gamers and diviners in Tarot with applied and pure mathematicians. But the comparison is based on some questions worth asking...



Gitanes cigarettes from the days of yore; made with Maize paper.