My intent is to examine the interplay between Michel Foucault’s *The Order of Things*\(^1\), originally published in France as *Les Mots et les choses* (Words and Things) in 1966, François Jacob’s history of heredity, *The Logic of Life*\(^2\), published in France in 1970, and his autobiography, *The Statue Within*\(^3\), 1987. I deploy block quotes throughout not only on account of Foucault’s verbosity, but also to provide context from the quoted works that shorter quotes would not provide.

To begin, *The Order of Things*. With this book, Foucault takes it upon himself to write a history of the modern sciences that looks beyond the typical progressive narrative.

I am not concerned, therefore, to describe the progress of knowledge towards an objectivity in which today’s science can finally be recognized; what I am attempting to bring to light is the epistemological field, the *episteme* in which knowledge, envisaged apart from all criteria having reference to its rational value or to its objective forms, grounds its positivity and thereby manifests a history which is not that of its growing perfection, but rather that of its conditions of possibility; in this account, what should appear are those configurations within the *space* of knowledge which have given rise to the diverse forms of empirical science.

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Such an enterprise is not so much a history, in the traditional meaning of that word, as an ‘archaeology’.

Now, this archaeological inquiry has revealed two great discontinuities in the *episteme* of Western culture: the first inaugurates the Classical age (roughly halfway through the seventeenth century) and the second, at the beginning of the nineteenth century, marks the beginning of the modern age. (xxii)

There are the two major points of *The Order of Things*: one, that there exists, under the surfaces of knowledge, under the opinions and ideas of individuals, a set of rules that, by ordering the world, entirely determines the possibilities of knowledge and bestows upon knowledge a regularity across intellectual fields traditionally considered immiscible. And two, that this set of rules, this *episteme*, is discontinuous in time; that is, now and again, it will abruptly become an entirely different order. There may be the appearance of continuity across time at the superficial level of ideas, but it is illusory. Ideas owe their existence to a certain epistemological framework and, when it disappears so too do the ideas, to be replaced by new ones which, though seemingly similar, rely on an utterly different conception of the world in their construction.

As a consequence of Foucault’s method, the influence of individuals in the movement of knowledge becomes vanishingly small:

I should like to know whether the subjects responsible for scientific discourse are not determined in their situation, their function, their perceptive capacity, and their practical possibilities by conditions that dominate and even overwhelm them. In short, I tried to explore scientific
discourse not from the point of view of the individuals who are speaking, nor from the point of view of the formal structures of what they are saying, but from the point of view of the rules that come into play in the very existence of such discourse... (xiv)

In other words, the *episteme* makes possible the individuals who elaborate its possibilities, not the other way around. The individual, therefore, vanishes from the discussion. On the one hand you have the *episteme* and on the other you have what is considered knowledge under that *episteme*, and since the latter is necessarily determined by the former, there is no need to introduce any such intermediary as the scientist.

What we see in *The Logic of Life*, François Jacob’s history of heredity and reproduction, is the adoption of Foucault’s ideas, but couched in language that will later be reiterated in *The Statue Within* (and with a major exception that I will come to later):

For a biologist, there are two different ways of examining the history of his science. Firstly, it may be considered as a succession of ideas, thus involving a search for the thread which guided thought along the path to current theories. This is reverse history, so to speak, which moves back from the present towards the past. Step by step, the forerunner of the current hypothesis is chose, then the forerunner of the forerunner, and so on. (10)

The alternative approach to the history of biology involves the attempt to discover how objects become accessible to investigation thus permitting new fields of science to be developed. It requires analysis of the nature of
these objects, and of the attitude of the investigators, their methods of observation, and the obstacles raised by their cultural background. …

There is no longer a more or less linear sequence of ideas, each produced from its predecessor, but instead a domain which thought strives to explore, where it seeks to establish order and attempts to construct a world of abstract relationships in harmony not only with observations and techniques, but also with current practices, values and interpretations. …

Here knowledge works on two levels. Each period is characterized by a range of possibilities defined not only by current theories or beliefs, but also by the very nature of the objects accessible to investigation, the equipment available for studying them and the way of observing and discussing them. It is only within this range that reason can manoeuvre.

(11)

This way of considering the evolution of a science such as biology is completely different from the preceding one. There is no longer any question of finding the royal road of ideas, retracing the confident march of progress towards what now appears to be a solution, using present-day rational values to interpret the past and examine it for pointers to the present. On the contrary, it means specifying the various stages of knowledge, defining the transformations and revealing the conditions which enable objects and interpretations to enter the field of the possible.

(12)
As might be expected, Jacob adopts the latter method in *The Logic of Life*. In that method are the features of *The Order of Things*, the *episteme* and its discontinuity, and the quasi-continuous surfaces, but rephrased slightly so that we can recognize in them the features of what Jacob will call in *The Statue Within* “day science”: progressive, martial, and certain; and “night science”, with its incertitude and desultoriness.

And, as in Foucault, the significance of the individual shrivels: “The importance of the individual decreases as the number of practitioners increases: if an observation is not made here today, it will most frequently be made somewhere else tomorrow.” (11)

In *The Statue Within*, two adjacent passages serve to illuminate the influence of Foucault on Jacob: “I see my life less as a continuity than as a series of different selves—I might almost say, strangers.” – the little boy, the adolescent, the medical student, the fighting man, the wreck, the beginner at the Pasteur institute – “All this gang marching in single file.” (15) And then:

> Recovering each of my past selves takes time and effort. I must concentrate, prepare myself, rather like setting out to visit old long-neglected friends. Or, rather, like planning a trip to foreign countries one has not returned to for years. Upon arriving in each country, one has to relearn the geography, the customs, the manners. Each time, one has to devote oneself to the unrelenting observation of existence, in a different texture of space and time. Each time, one must relinquish the habits of the last country before acquiring the habits of the new. Each time one must relearn a particular milieu, particular faces, a particular language. (16)

There, in *The Statue Within*, is visible the influence of Foucault, in a sequence of discontinuous and foreign figures, each with its own perspective and habits. There, too, is that
second method of history, now made personal. And, in a way, the subject, the individual, is missing. Instead of a single, solitary self, a big “I”, we are presented with fragments. There is, however, a certain unity in *The Logic of Life* and *The Statue Within*, and this is where Jacob diverges from Foucault.

*The Order of Things* ends with the image of “man”, the object of the human sciences and a notion which only became epistemologically possible at the beginning of the 19th century, as “a face drawn in sand at the edge of the sea,” (387) an image that emphasizes the transience and impermanence of the objects of knowledge. It is a conclusive image; a period ending one era and initiating another, with no exchange at the threshold, no play of meaning across chapters. As it has been phrased, by analogy with Nietzsche, man is dead. There is no ellipsis. For Foucault, the objects of knowledge disappear completely because the specific construction of knowledge that allows for them to exist changes, with a saltation, to something completely different, replacing the former wholesale and never allowing for old modes of thought to be revisited.

Jacob, whose constant agonizing over annihilation and mortality is a continuous presence in *The Statue Within*, suggests an alternative in that text and in *The Logic of Life*. We know that for Jacob former selves never disappear, but reassert themselves at times, revived by familiar sensations and situations. They must be, in some way, in some part, maintained:

And then, how not to see that all these selves of my past life have played the greatest role, and the greater the earlier they came, in the development of the secret image that from the deepest part of me guides my tastes, desire, decisions. Starting in the younger years, imagination seizes on the people and things it encounters. It grinds them down, transforms them, abstracts a feature or a sign with which to shape our ideal representation of
the world. A schema that becomes our system of reference, our code to decipher oncoming reality. Thus, I carry within a kind of inner statue, a statue sculpted since childhood, that gives my life a continuity and is the most intimate part of me, the hardest kernel of my character. I have been shaping this statue all my life. I have been constantly retouching, polishing, refining it. … Thus, I harbor not just one ideal person with whom I continually compare myself. I carry a whole train of moral figures, with utterly contradictory qualities, who in my imagination are always ready to act as my fellow players in situations and dialogues imprinted in my head since childhood or adolescence. For every role in this repertory of the possible, for all the activities that surround me and involve me directly, I thus hold actors ready to respond to cues in comedies and tragedies inscribed in me long ago. Not a gesture, not a word, but has been imposed by the statue within. (Statue, 18-19)

There, like in Foucault, the surface possibilities are determined by something deeper. But, where Foucault has in that place an order that changes only by dissolving completely and being replaced, Jacob postulates a substrate on which each new self leaves an imprint, a figurative statue which allows for continuity and continuation.

In The Logic of Life, too, a unity. Near the end of The Logic of Life, Jacob declares: “There is a coherence in the descriptions of science, a unity in its explanations, that reflects an underlying unity in the entities and principles involved. Whatever their level, the objects of analysis are always organizations, systems.” (323) Earlier in the book, he says:
There is not one single organization of the living, but a series of organizations fitted into one another like nests of boxes or Russian dolls. Within each, another is hidden. Beyond each structure accessible to investigation another structure of a higher order is revealed, integrating the first and giving it its properties. The second can only be reached by upsetting the first, by decomposing the organism and recomposing it according to other new laws. Each level of organization thus brought to light leads to a new way of considering the formation of living beings. …

The discovery of each ‘Russian doll’, the demonstration of these consecutive levels are not the result of a mere accumulation of observations and experiments. More often they express a deeper change, a new way of considering objects, a transformation in the very nature of knowledge. (16-17)

These passages reflect the same outlook as *The Statue Within*. Earlier and exterior dolls open onto different (and in this case smaller and finer) dolls, which nonetheless share the general shape of all the larger dolls. In the sciences, each rosy-cheeked devotchka hides another just like it.

Taken all together, we find in Jacob’s works the Foucauldian idea of discontinuity, at a historical and personal level, but also a purely Jacobian internal essence which is changed and imprinted by each discontinuous era, while maintaining the stamp of all things prior. The structural similarities between the historical in *The Logic of Life* and the personal in *The Statue Within* suggest that we can pull the two together; that, as much as the present Jacob stands at the end of line of selves, he also stands at the end of a line of historical figures, both asserting an influence on his life through their imprint on his internal statue. The scientist, the wreck, the
student, the soldier, the adolescent, and the little boy stand with this girl of twenty, the father, the grandfather, all the males in the family who so obligingly tell their war stories, *la générale*, Foucault, the individuals we term Galton, Darwin, Bernard, Humboldt, Cuvier, Buffon, Linnaeus; and, even further back, Roman ladies and Greek goddesses, Cleopatra and Socrates. The long dead are brought to bear on the present; they live on.

It is with this mechanism that Jacob denies finitude. Each momentary self adds to the statue within. Therefore, by renewing himself, changing fixed ideas, reaching for his little lights, becoming someone new, Jacob adds more of himself onto the end of that long line that his descendants, genetic and intellectual, will inherit. In that way, so long as he keeps changing, he resists oblivion.