Contingency

A philosophical notion that seems particularly useful for geographical reasoning. Lalande goes back to Aristotle for the general meaning of the term: *"Est contingent tout ce qui est conÃ§u comme pouvant Ãªtre ou ne pas Ãªtre Ã quelque Ã©gard et sous quelque rÃ©serve que ce soit [. . .] (Si bien qu') un Ã©vÃ©nement futur est contingent si, toutes choses Ã©tant ce qu'elles sont, ce futur peut se produire ou ne pas se produire"*1 . (The term is opposed in all its meanings to â€˜necessary'.) The problem is then to know the conditions that make an event contingent, and at the same time, how it can occur despite this very character of contingency. This problem deserves to be discussed here, as many geographical situations, many spatial configurations, may be interpreted at least partially in terms of contingency.

The process that allows the emergence of contingent phenomena was very clearly described in the late nineteenth century by philosopher and mathematician A. A. Cournot, who wrote, *"(Il y a des Ã©vÃ©nements qui sont amenÃ©s) par la combinaison ou la rencontre de phÃ©nomÃ¨nes qui appartiennent Ã des sÃ©ries indÃ©pendantes dans l'ordre de la causalitÃ©"*2 . This introduces a notion of contingency, as *"le fait naturel ainsi Ã©tabli ou constatÃ© consiste dans l'indÃ©pendance mutuelle de plusieurs sÃ©ries de causes et d'effets qui concourent accidentellement Ã produire tel phÃ©nomÃ¨ne, Ã amener telle rencontre, Ã dÃ©terminer tel Ã©vÃ©nement, lequel pour cette raison est qualifiÃ© de fortuit"*3 (Cournot. 1872.). A commentator on the writings of our author summarises in the following terms the manner in which Cournot conceives the independent elements: *"Pour Cournot, il y a dans la nature des â€˜petits mondes' qu'on peut isoler les uns des autres [. . .] C'est l'existence d'Ã®lots ou de systÃ¨mes sÃ©parÃ©s qui rend Ã la fois possible l'application de l'idÃ©e de relation causale Ã l'intÃ©rieur de chaque monde-Ã®le et l'application de l'idÃ©e de hasard d'un monde-Ã®le Ã un autre. (Ainsi) l'idÃ©e de causalitÃ© et l'idÃ©e de hasard possÃ¨dent une Ã©gale objectivitÃ©: la premiÃ¨re jouant Ã l'intÃ©rieur de systÃ¨mes qui font corps; la seconde, au premier chef, entre des systÃ¨mes jusque lÃ indÃ©pendants"*4 (Saint-Sernin B. 1998). From there on, we may conclude that many processes may be interpreted in terms of what we may call, as Cournot does, a â€˜contingent causality'.

Probably because of the complexity of interferences between the different logical and spatial domains geographers must work with, Cournot's formulas would appear to apply particularly well to geographical reasoning. On the one hand, the multiplication of the types of determinations that contribute to the generation of spatial structures limits the role of the relationships of necessity between constant antecedent and consequence; on the other hand, however, a consideration of interferences re-introduces the play of causality and allows for rational prospects. One can identify causal series-successive chains of relationships between cause and effect-that work independently of each other, but situations that occur in each of these series at the same moment may give rise to interactions that lead to innovations, themselves subsequently followed by consequences. These interferences between independent domains, which are particularly important for understanding, take various forms and lend themselves to different analyses.

A first aspect relies on a reasoning essentially expressed in terms of space, on the basis of the confrontation between situations considered in synchronic terms. Then there is a consideration of the interferences between distributions obeying different logics, which inter-combine, often producing massive effects. For example, the combination of an abundance of oil and a low population density has moderated the needs of the states of the Arabian Peninsula in the matter of interior investments and consumption, because of the limited demographic size linked to this low density. This situation has made it possible for these states to draw upon large amounts of exportable capital, and to assume a major role in international affairs. The role of what the UN calls â€˜capital-surplus oil-exporting countries' has been significant enough in the working of the â€˜world system' to allow us to reflect that, in a way, without these combinations, â€˜â€˜the face of the world would have been different"-just as it was different in earlier times because of the length of Cleopatra's nose.

Now this association of oil reserves with low densities results from the interference of two clear but independent causal series: the first, which belongs to geology and gives account of oil accumulation; the second, which links sparse human settlement and dry climate, which is self-explanatory, but by a chain of causes unrelated to geological processes. If we take into account strategic circumstances and geo-political positions that are added to the system of explanation, we can see the richness and complexity of the interplay of interfering independent causal series.

In other-even more significant-situations, analysis stresses the interplay of diachronic processes. Here the reasoning relies on the birth of innovations, of emerging spatial structures, as a result of contingent causalities. The configurations created in this way can then evolve and meet diverse fates. They can be evanescent and quickly disappear. But those that hold our attention are naturally those that are consolidated and last for some time. In many cases, novelties appear in precise and limited places, but later gain a wider extension through the interplay of processes of diffusion.

The emergence of a Chinese quarter in the thirteenth district (â€˜arrondissement') of Paris, i.e., in a different location from that of other groups of recent foreign origin in the Parisian space, may be seen as the result of a coincidence between two phases of mutually independent processes: first, the phase brought about by the outcome of the American war in Vietnam, which led to the

exodus of Chinese populations that had been settled in the country for some time, notably in Cholon, with significant numbers emigrating to France for historical reasons; second, the phase of the development of the real estate market in an area of Paris where urban renewal programmes have come to the fore at the precise moment when a reversal of economic circumstances made it more difficult to sell the dwellings to the French. Thus the settlement of Chinese people in this neighbourhood began and continued because of the working of a positive retroaction loop. Indeed we see here two series of events, independent of each other, each obeying its own laws, whose mutual interference is the result of chance. This is a clear example of the mechanism described by Cournot, belonging in the category of â€˜contingent causality'. This contingent causality started a process that brought about the emergence of a â€˜geographical object', which later perpetuated itself through the working of a series of well-identified mechanisms, but which did not spread beyond the fairly narrow limits of a Parisian neighbourhood.
On a quite different scale and in another domain, the geography of the â€˜main' religions has resulted as a general rule from their emergence in a well-delimited place, in conditions that may be considered as reflecting contingency, and has later developed and spread in accordance with well-known mechanisms.
We can therefore readily observe that the analysis of the patterns we have been considering here relies to a large extent on chains of causalities of the determinist type: they appear not only in the series that interact, as it were, â€˜upstream' from the intervention of the random event, but also â€˜downstream', as the destiny of the geographical objects so created is regulated by well-known mechanisms, in some cases by the working of actual rules.
To give room for contingency in the interplay of causality is to show both its interest and its limits, thus finally also emphasising the role of determinations, rules and laws.

1"Everything that is conceived as able to be or not to be in any respect and under any conditions is contingent [. . .] (So that) a future event is contingent if, all other things being equal, this future may occur or may not occur" (courtesy translation).

2"(There are events which are generated) by the combination or coming together of phenomena that belong to series that are independent of each other in the order of causality" (courtesy translation).

3"The natural fact established or observed in this way consists in the mutual independence of several series of causes and effects which accidentally concur to generate a given phenomenon, to bring a given encounter, to determine a given event, which for that reason is called fortuitous" (courtesy translation).

4"For Cournot, there are in nature â€˜small worlds' which can be isolated from each other [. . .] The existence of small islands or of separate systems is what makes it possible both to apply the idea of causal relationship within each island-world, and to apply the idea of chance from one island-world to another. (Hence) the idea of causality and the idea of chance possess an equal objectivity: the first one acting within systems that work together; the second, acting primarily between systems that until then were independent of each other" (courtesy translation).

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