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What are the characteristics of revolution and evolution?

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Abstract. This conceptual paper describes some characteristics of revolution and evolution. Revolution here is an historical process that generates a rapid and structural change in society. Instead, evolution is a progressive growth and change, generating a transition from simple to complex systems. Overall, then, this study suggests that revolution and evolution are a result of human activity in society originated to satisfy specific needs and/or to cope with and adapt in the presence of environmental threats and changing contexts.

Keywords. Radical change, Rebellion, Coup d'état, Insurrection, Struggle, Internal wars, Growth, Social progress, Advancement, Development.

JEL. B50, B59, I00, I10, I30.

1. Introduction

Revolution is one of the most important events in the history of human society (Amman, 1962; Pettee, 1938). Revolution can be defined as: “change, effected by the use of violence, in government, and/or regime, and/or society. By society is meant the consciousness and the mechanics of communal solidarity, which may be tribal, peasant, kinship, national, and so on; by regime is meant the constitutional structure—democracy, oligarchy, monarchy; and by government is meant specific political and administrative institutions” (Stone, 1966, p.159). This definition allows to distinguish between the seizure of power that leads to a major restructuring of government or society and the replacement of the former elite by a new one, and the coup d'état involving no more than a change of ruling personnel by violence or threat of violence. In the 1960s, social scientists at Princeton University have changed the word "revolution" with the concept of "internal war": any attempt to alter state policy, rulers, or institutions by the use of violence in society, where violent competition is not the norm and where well-defined institutional patterns exist (Paret, 1961, cf., Rosenau, 1964). In philosophy, Hegel suggests that revolution is equated with irresistible change represented by a manifestation of the world spirit in an unceasing quest for its own fulfillment (Benhabib & Marcuse, 1987). Marx (1976, 1978, 1981) argues that revolution is a struggle between the bourgeoisie and the proletariat. Arendt (1958, 1963) interprets the revolutionary experience as a kind of restoration, whereby insurgents attempt to restore liberties and privileges, which were lost as the result of government's temporary lapse into despotism. Instead, de Tocqueville (1955, p.8) has defined revolution as an overthrow of the legally constituted elite, which initiated a period of intense social, political, and economic change.

The main characteristics of revolution according to Deutsch (1964, pp.102-104) are:

- a) degree of mass participation
- b) duration

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- c) number of persons killed both during and after the revolution (a measure of intensity)
- d) intentions of the insurgents

A prime factor of revolution is the emergence of an obsessive revolutionary mentality. In the behaviorist approach, the causes of alienation of revolutionaries and of the weakness of incumbent elite are economic factors. Parsons (1951) treats disaffection or "alienation" as a generalized phenomenon that may manifest itself in crime, alcoholism, drug addiction, daytime fantasies, religious enthusiasm, or serious political agitation (cf., Coccia, 2014, 2014d). Marx (1976, 1978, 1981) states that popular revolution is a product of increasing misery, whereas de Tocqueville (1955) claims that revolution is a product of increasing prosperity. Olson (1963) and Lewis (1963) argue that revolutionaries are the product of rapid economic growth, which creates both *nouveaux riches* and *nouveaux pauvres*. The initial growth phase may cause a decline in the standard of living of the majority of people because of enormous forced savings for reinvestment. Revolution can increase the gap between expectations (social and political for the new rich, economic for the new poor) and the realities of everyday life (cf., Gottschalk, 1944). In short, revolution creates new expectations by economic improvement, followed by economic recession and governmental reaction, which widen the gap between expectations and reality (Davies, 1962).

Davies (1962) argues that the fundamental impetus toward a revolutionary situation is generated by rapid economic growth associated with a rising of the standard of living and a long-term phase of growth followed by a short-term phase of economic stagnation. In this context, Coccia (2018) seems to reveal a sequential historical process that runs from wars between great powers occurring in phases of instability of long waves (peak and/or trough) to clusters of innovation (in the trough of long waves), which trigger the upward phase of new long waves¹.

Revolution can generate a variety of typologies in different societies. Brinton (1938, pp.3-4) suggests a differentiation between coup d'état that is a simple replacement of one elite by another, and major revolutions that are associated with social, political, and economic change. Huntington (1962, pp.23-24) presents a further refinement in the classification of revolution using four categories: the internal war, the revolutionary coup, the reform coup, and the palace revolution.

Finally, Chalmers (1964) categorizes revolution in six typologies as follows:

1. the Jacquerie is a spontaneous mass peasant rising.
2. the Millenarian Rebellion is similar to the first but with the added feature of a utopian dream, inspired by a living messiah.
3. the Anarchistic Rebellion is the nostalgic reaction to progressive change.
4. the Jacobin Communist Revolution is: "a sweeping fundamental change in political organization, social structure, economic property control and the predominant myth of a social order, thus indicating a major break in the continuity of development" (Sigmund Neumann as quoted in Chalmers, 1964).
5. the Conspiratorial coup d'état is the planned work of a tiny elite fired by an oligarchic ideology.
6. the Militarized Mass Insurrection is a phenomenon of the twentieth century based on a deliberately planned mass revolutionary war guided by dedicated elite.

Coccia (2018c, 2018d) argues that terrorism (a distinct form of political violence with some characteristics similar to revolution) thrives in specific regions with high growth rates of population that may generate income inequality and relative deprivation of people. Overall, then, revolutions are a systematic process due to manifold economic, social, psychological, anthropological, and perhaps biological factors. Of course, these factors can change over time and space in society.

¹cf., Coccia, 2005a, 2015b, 2016, 2017b, 2018e, 2018f

2. The concept of evolution

The concept 'evolution' is associated with a specific directional activity. The word 'evolution' was first applied to natural phenomena by the German biologist Albrecht von Haller in 1744 (cf., [Richards, 1992](#)). Darwin (1859) preferred phrases like 'descent with modification' and only once wrote 'evolved'. Spencer (1957) did much more than Darwin (1859, 1871) to popularize the term 'evolution' that can be associated with different types of phenomena, including all feasible manifestations of development and change ([Hodgson & Knudsen, 2006](#)). In general, under some conditions, evolution must involve Darwin's principles of variation, inheritance and selection ([Hodgson & Knudsen, 2006](#)). Bagehot (1872), Ritchie (1896) and Veblen (1899) argued that the principle of selection could explain survival and evolution not only of individuals, but also of groups, customs, nations, business firms and social institutions. The principle of selection provides the means for explaining adaptedness, survival and evolution in society. In the evolution of complex systems, some scholars point out self-organization or spontaneous order as an alternative concept to Darwinian selection ([Ashby, 1947](#); [Von Foerster, 1960](#)). Other scientists consider social evolution as a Lamarckian process rather than Darwinian one. In fact, the Lamarckian inheritance of acquired characters may occur in social evolution. These mechanisms of change supporting evolution are often very different, within and between systems in nature and society ([Hodgson & Knudsen, 2006](#)). Socioeconomic evolution is due to successful rules, habits or behavior spread by imitation and learning. Socioeconomic evolution is also based on characteristics acquired or learned by individuals that are more adapted to their environment.

Individuals and human society sometimes give up resources to benefit their neighbors, to the extent that this helping lowers the entity's reproductive fitness ([Wenseleers et al., 2010](#); [Wenseleers, 2006](#)). These altruistic traits pose a difficulty for Darwin's theory of natural selection, which emphasizes the spread of individually advantageous traits (Darwin 1859; [Pennisi, 2005](#)). This altruism, generating cooperation between potentially competing individuals, and as a consequence co-evolution, abounds in natural and social systems ([Gintis et al., 2005](#)). Szathmáry (2011) argues that the benefits of cooperation can drive the social evolution because it must pay off, even if it is immediately costly to cooperators (cf., [Bourke, 2011](#); [Queller, 1997](#); [Maynard, Smith & Szathmáry, 1995](#)).

The concept of evolution in society is associated with the idea of human progress. Spencer (1902, p.253) suggests that social evolution is: "the full happiness of each, and therefore to the greatest happiness of all". In particular, the idea of evolution in society is based on: "progressive satisfaction of human wants in all their ramifications and complexities. It is this inner kernel of human satisfactions which gives character to the whole account of social evolution; which is interpreted, not in terms of mechanism, ... but of purpose" ([Woods, 1907, p.816](#)). The fundamental elements of social evolution are health, wealth, sociability, knowledge, beauty, etc. (cf., [Small, 1905, p.682](#)). These elements support the acquisition by humanity of better and more complex forms of life. Social evolution is associated with new technologies that yield greater satisfaction of human wants (cf., [Coccia, 2010, 2014, 2015](#)). Moreover, evolution is achieved in appropriate structures with strong democracy, good governance, higher education, and higher innovative outputs ([Coccia, 2010, 2014, 2018](#)). In fact, [Woods \(1907, p.817\)](#) points out that: "Progress in an individual or in a community is thus a function of all the various qualities and aspects of life which are there realized. Not physical well-being alone, nor the abundance of wealth, nor even the moral advance which has been attained, may serve as the measure of progress; all of the interests are required because all are phases of normal human life." Hence, the determinants of socioeconomic evolution and, as a consequence, of human

progress are human wants and human control of nature through science advances and new technology (cf., Woods, 1907)².

Finally, evolution can be categorized in two types:

- *growth* is a proportionate change in a system
- *development* denotes a disproportionate change in the size of a sub-system as a consequence of change in the overall size of a system (economic, biologic, social, etc.).

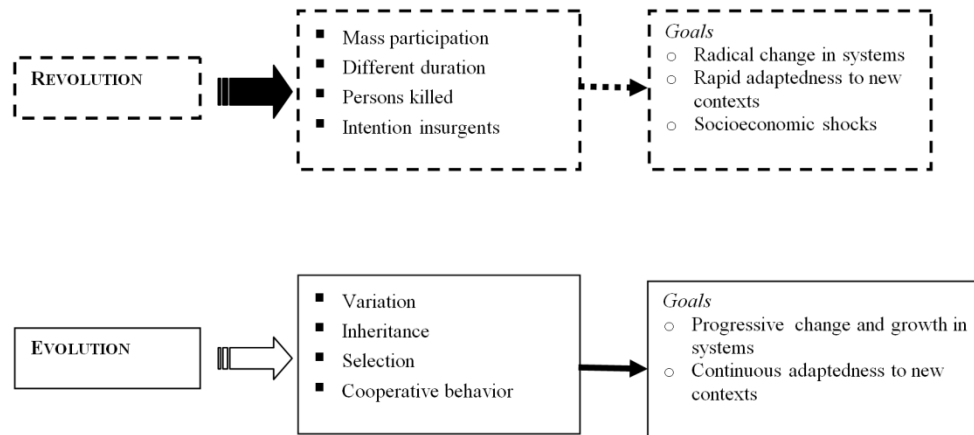


Figure 1. General characteristics and goals of revolutions and evolutions

3. Conclusion

Krader (1976, pp.109-110) argues that: “The concept of advancing society through the combined agencies of evolution and revolution was at one time related in a single overarching theory. The opposition of evolution and revolution, on the contrary, stands to us not as a dialectical relation whose contradictions are to be resolved, but as an unresolved tension.... The theory underlying social evolution is doubly linked to biology”. Overall, then, evolution and revolution are a cyclical process in human society affected by manifold factors that can change over time and space (Figure 1). A comprehensive analysis of these phenomena in nature and society, affected by economic, social, psychological, anthropological, and biological factors of the entities under study, is a non-trivial exercise. To conclude, revolutions and evolutions are a result of human activity in society to satisfy specific needs to cope with and/or adapt in the presence of environmental threats and changing contexts.

² Cf. also studies by Coccia, 2005, 2009, 2010, 2010a, 2010b, 2010c, 2011, 2012, 2014, 2014a, 2014b, 2014c, 2014d, 2015, 2015a, 2017, 2017a, 2018, 2018a, 2018b, Coccia & Benati, 2018; Coccia & Bellitto, 2018; Coccia & Cadario, 2014; Coccia & Rolfo, 2010; Coccia *et al.*, 2015.

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