

CREATING REBELS

What makes people become rebels? Is there some way to encourage people to question unjust practices and act against them? These questions have long been of interest to social activists.

One common view is that people are more likely to become activists if they are made aware of social problems. Hence there are continual efforts to expose the consequences of war, poverty, exploitation and the like. Another approach is to make social action a satisfying and bonding experience. This leads to efforts to improve group dynamics, build personal relationships and design actions that are emotionally uplifting for participants. Yet another approach is to encourage people to make ever larger commitments, beginning with signing a petition and progressing through meetings, rallies, selling newspapers and direct action. These and other approaches have been developed and applied in a pragmatic fashion for many decades.

Every now and then an entirely new and provocative perspective becomes available. A book by Frank J. Sulloway fits this category. Entitled *Born to Rebel: Birth Order, Family Dynamics, and Creative Lives* (New York: Pantheon, 1996), it argues that a child's experience in the family is the key factor in determining whether he or she is a supporter of the status quo or a rebel. Sulloway's main interest is in explaining support or opposition to revolutionary scientific theories, though he also addresses political attitudes. While not dealing with the practical question of how to create social activists, his perspective

provides some important lessons.

Sulloway's book is pioneering both in method and conclusion. His method is to collect extensive data on historical individuals. He analysed 121 historical events and used biographical data on more than 6,500 individuals. This data includes family background, social attitudes and career characteristics. He formulates hypotheses and then tests them using the data.

The most dramatic conclusion from this analysis is the vital importance of family dynamics in shaping an individual's social stance. In particular, the key variable is a person's birth rank. First-borns are more likely to support the status quo, whereas later-borns are more likely to support revolutionary causes.

Sulloway analysed 28 revolutions in science, such as the Copernican revolution, the Darwinian revolution, special relativity and continental drift. For each one, he collected data on scientists who took a leading role in supporting or opposing it. To assess scientists' personalities and positions, he asked expert historians of science to make judgements, which he then incorporated in his database. After collecting all this data, Sulloway had dozens of variables – such as nationality, social class, gender, personality, religious attitudes, political attitudes, education, age and scientific eminence – that he could test to see how much they helped explain a scientist's position on a revolution.

Out of all these factors, Sulloway found that one stood out as a prime influence: birth order. Later-born scientists were more likely to

support revolutions in science. For example, of scientists prominent in the controversy over Darwinism between 1859 and 1875, later-borns were 4.6 times more likely than first-borns to be supporters rather than opponents of Darwinism. (Ratios such as this are corrected for the greater number of later-borns.) The only exceptions to this pattern are 'conservative theories' such as eugenics. First-borns are more likely to support conservative innovations.

So important is birth order that it overwhelms other influences, being twice as important as all other factors combined.

Why should one's birth rank – one's position in the sequence of children in a family – have such an influence on attitudes? To explain this, Sulloway introduces a Darwinian model of family dynamics. Essentially, children are in competition with each other for family resources, especially affection from their parents. The eldest child has a choice of strategies and is likely to choose the central niche of identifying with the parents and authority generally. This is consistent with the personality characteristics of first-borns, which include ambition, conscientiousness and achievement motivation. An only child develops similarly to a first-born. Later-borns have a hard time competing with an older, stronger and more successful sibling in this niche, and are more likely to branch out into other areas where they can become higher achieving than older siblings, in this way increasing their odds of attracting support from parents. As a consequence, later-borns are more likely to question the status quo and

to develop a 'revolutionary personality'.

Other factors also enter into the picture. High conflict with parents increases the odds of rebellion. But these other factors must be considered in relation to birth order. Conflict with parents is more influential in changing first-borns (towards greater rebellion) than in changing later-borns. Other factors that are important are the total number of children, gender, age gaps, age when a parent is lost, social class and temperament. Each of these needs to be understood in a picture of a struggle within the family for resources.

As well as analysing revolutions in science, Sulloway investigated the Protestant Reformation, the French Revolution and other political revolutions. For example, he analysed the percentage of first-borns in the legislature in different French political parties during the revolutionary period 1789-1794. This was high among the staunch royalists who had supported the monarchy. It was lowest among the parties devoted to liberal principles. But it was also high among the revolutionaries who launched the Reign of Terror. Sulloway says that "First-borns sought to prove their revolutionary loyalties by their predilection for violence, not by their devotion to liberalism" (page 313). A significant point is that social class explains almost nothing about the position of leading political figures during the French Revolution, whereas birth order explains quite a lot. The Revolution was struggle of brother against brother, with many siblings lined up on opposite sides of the chamber.

Born to Rebel is a frontal challenge to Marxist theories of revolution, arguing that social class is of trivial significance compared to birth order in predicting who will rebel. It also challenges Freudian analysis in arguing

that sex is much less significant than birth order in shaping personality.

There are many objections that can be raised on first hearing of Sulloway's arguments. For example, perhaps the conservatism of first-borns was due to the practice of primogeniture, in which the family inheritance went to the first-born son. Sulloway considered this and tested it, finding it not to be a major factor in the propensity to rebel. He has looked at many details and complicating factors, such as the removal of a child from a family. He finds that a later-born who is removed and reared by a relative as a first-born behaves like a typical first-born. The key is functional birth order rather than biological birth order, because that is what affects the struggle for family resources. Sulloway's book is the product of 25 years of work and is an impressive piece of scholarship. As well, it is engagingly written.

He notes that while his findings are predictors of behaviour only in a statistical sense, they are remarkably robust, applying over twenty different countries in his sample and over a period of nearly five centuries. Few historical generalisations have a similar power.

Even without passing judgement about the validity of Sulloway's analysis, it is still possible to draw some insights concerning the task of promoting progressive social change. Perhaps the most significant point is the importance of hypothesis testing. Sulloway is an historian who subscribes to the traditional scientific approach of formulating hypotheses and then using data to test them. For example, one of his hypotheses is that "radical change is more acceptable to young people". He tested it using his data and found it confirmed.

Social movements are not noted for their commitment to hypothesis testing. They are

more likely to proceed on the basis of the good judgement of experienced activists. This may work, but how do we really know?

Sulloway's task in *Born to Rebel* is to help explain the dynamics of scientific and other revolutions. The task of social movements is to change society, so the hypotheses proposed would need to involve variables that activists can control. It would be possible, for example, to produce two leaflets with differently presented appeals and to see which one was more effective – and with which sorts of people. It would be possible to try out different types of meeting formats to see which ones proved more attractive to new members. Activists make judgements about such matters routinely. Hypothesis testing could help sort out the helpful insights from wishful thinking and perhaps reveal some unexpected findings too.

A key lesson from Sulloway's findings is the importance of material conditions in the development of a revolutionary personality. Marx emphasised material conditions but concentrated on social class. Sulloway emphasises a different set of material conditions, namely the social environment of the family as one grows up. This should give hope, since social environments can be changed. Activists can use Sulloway's approach to investigate how to design society to create more rebels who support progressive innovations.

One obvious area to study is the life history of activists. Among 'tender-minded' activists, especially those who reject violence, it is to be expected that later-borns will predominate. But there are some first-borns in this group. It would be revealing to find out what has changed these first-borns into tender-minded activists.

Sulloway gives a few hints. He notes that Galileo was a first-born and hence not likely

to be a revolutionary scientist. Galileo was an exception to the rule because he was the son of a radical: "His father taught him to question authority and to do so, moreover, by *experimental means*" (page 204).

Group norms can also prevail over the influence of family dynamics. For example: "A prominent exception to the rule that first-borns endorse violent methods is seen in groups like the Quakers – whose pacifist philosophy became institutionalised as a group norm" (page 538). Group norms also have an enormous influence in many of the kibbutzim in Israel, at least in the early years when children were reared in same-age groups with relatively little contact with parents.

As families become smaller, first-borns and only children become a larger fraction of the population, which, according to Sulloway, is likely to be a force against radical change. This is especially the case in China where there are strong pressures against large families. Large families with many later-borns would be more conducive to creating more rebels. Could this be fostered by more communal living, bringing many children together? It's hard to tell, especially if there are many adults in the communal home. Some hypothesis testing might help in determining the most suitable home environment for creating tender-minded rebels.

More generally, the design of life experiences can be used as a way of creating preferred personality types. If the goal is to shape other people's lives, this can be seen as manipulative. But if family dynamics already shape people's personalities, is it so horrible to design life experiences to foster a preferred personality? Advertisers and public relations departments work hard at this already. Certainly it seems reasonable for a person to think about their own preferred personality

and to choose life experiences to foster it. For example, Sulloway finds that extensive travel is correlated with revolutionary personality, so undertaking travel is a way to transform one's own attitudes.

Closer to home is the environment of the social movement organisation. Like all organisations, social movement groups must deal continually with struggles between members. In some ways these groups, especially the more close-knit ones, are like families, and so some of the strategies for obtaining group resources are likely to be common, including rebellion against the founders and leaders who are like surrogate parents. The question is, how can groups harness their own dynamics to foster their quest for a better society? What is the best structure to encourage members to become committed and autonomous activists? Again, testing of some hypotheses would be very helpful.

Born to Rebel has an implication that birth is destiny, namely that one's birth rank and upbringing are determining influences. Some readers will resist this argument because, they say, they are exceptions to the rule. But the wider implication of Sulloway's argument is that life experiences are the major influence. An alternative title might be *Learning to Rebel*.

Being a rebel should not be a goal in itself. If one's parents have enlightened attitudes, then it is better that children adopt them rather than rebelling and becoming terrorists or obedient functionaries. The wider challenge is to develop better insights into creating a better world and the sort of people who will help bring it about and maintain it. Whether or not one subscribes to Sulloway's views, his book is an important stimulus in pursuing this agenda.

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