attributed to the executive branch).

Figure 3.10 demonstrates how these dissonance levels are determined. Discontent, as previously mentioned, is the difference between popular desires and government policy. Disaffection is the descrepancy between government policy and the law; a difference here is representative of institutional hypocrisy. Disagreement is the difference between the desired condition of the population and that mandated by the law. Total popular unrest is determined as the sum of these dissonances.

Even though total unrest is a powerful determinant of popular opposition to government practices in general, its prime use here is to determine the amount of political turmoil present. Turmoil is the difference between the average political unrest and current levels. When popular unrest is increasing quickly, turmoil is high and the "sense of urgency" is likely to cause actions which are less rational than one might expect under more normal circumstances. Machiavelli speaks of this tendency when describing the establishment of the tribures:

> ". . . when the Roman people became annoyed with the title of consul and wanted plebians made eligible to become consuls—either that or curtail consular authority—the nobility, in order not to blemish consular authority with either one reform or another, chose a middle course, agreeing to the creation of four tribunes, with consular power, to be chosen either from among the people or the nobles. This satisfied the people . . . A noteworthy event arose from this: when the Roman people came to electing these tribunes, although they could have chosen all of them from the plebians they chose all nobles. Livy says, concerning this matter: The result of these elections demonstrated that during the struggle for liberty and honor their spirits differed from their attitude when their judgement was less impassioned after the struggles had ceased.' "(*Discourses*, 266)

It is with the aid of the variables representing disagreement and disaffection that we are able to determine the focus of popular unrest. Disagreement indicates dissatisfaction with the laws set by the legislature. Thus, Opposition to Legislature is formulated as a function of general discontent and disagreement. Likewise, Opposition to Executive is a function of discontent and disaffection. Turmoil has the capability to exacerbate both of these processes. In addition, the levels of freedom and welfare have an effect upon the degree of opposition. The reasoning here is similar to that elucidated in the previous discussion of protest. In a society which tolerates no dissent, it is likely to be much more difficult to stage a successful resistance movement. Communication will be difficult, government harrassment common. Likewise, in those societies where the majority of the people are destitute, there is little free energy left for opposition to government policies. Starving, uneducated, overworked people make poor revolutionaries.

Having determined the level of opposition to the government, executive, and legislature, we must keep in mind that absolute levels are not so important as relative ones are. Over the

course of time, a society becomes inured to violence, taking measures to compensate. Governments increase their security forces and peoples attitudes become less affected by acts of opposition to the government. They may actually come to be expected. In this situation, a few solitary acts are unlikely to threaten the legitimacy of an entire regime. However, under conditions where violence is rare, the appearance of dedicated opposition could precipitate a major political crisis.
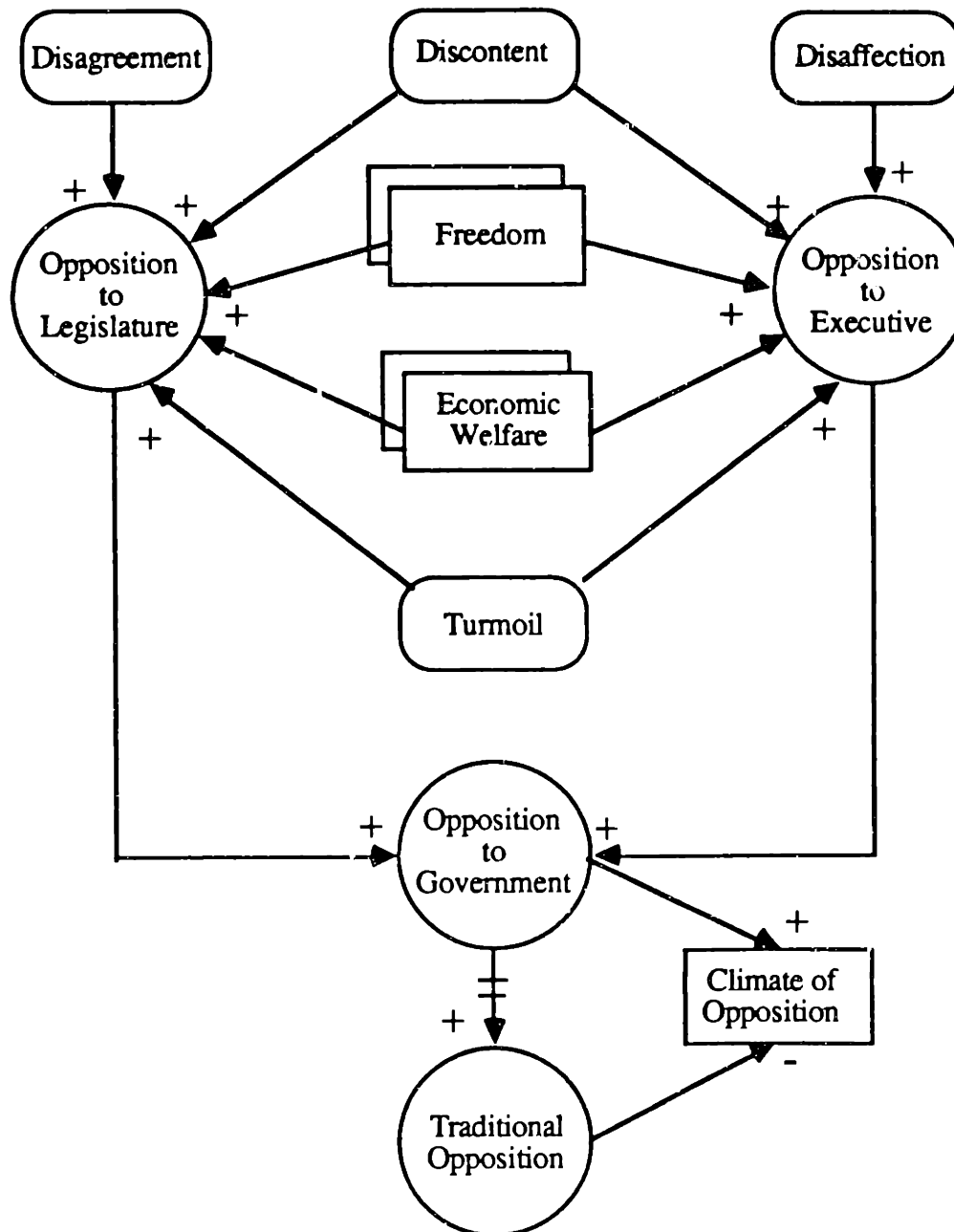

Figure 3.11: Determinants of Violent Opposition

Chapter Four: Findings

4.0 The Equilibrium Reference Mode

In order to establish a baseline for further comparisons, the model was calibrated so that normal parameter values would produce equilibrium behavior. Although there are a number of different sets of parameters capable of producing equilibrium behavior, those settled upon represent a good approximation of the conditions present in Machiavelli's ideal plurality. The legislative influence of all three factions was set equal to 1/3, giving each an equal voice in the law-making process. The initial value for Executive Power was then set at .4. Further, output fraction allocated to the aristocracy and populace were also set equal.

In addition to balance, Machiavelli holds another characteristic dear--conflict. This is represented by the initial values of social desires. Popular desires for both welfare and freedom are set equal to 65. Similar aristocratic desires start equal to 35. Thus, we have here a large conflict of values. The executive is taken to have values which lie between the two extremes at 50. Thus, given the fact that popular protest directly cancels out aristocratic discontent in equilibrium (because of high levels of freedom and welfare), the model starts out in perfect balance, with all variables representing the actual state of society equal to 50. Over the course of 35 years, there is negligible deviance from these initial values. In Graphs 70-75 we see that balance of power, economic and political well-being, and social expectations and desires all remain constant. An ideal equilibrium such as this one is dependent upon the lack of any noise in the system. The addition of of any random inputs serves to elicit oscillation at the natural frequencies of the system.