A Systems Model of Language Planning

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A Systems Thinking (ST) approach to language planning has not yet been addressed in the corpus of language planning literature. ST encourages the study of a language, understanding that its corpus, status and acquisition are interconnected. ST allows us to gain a better understanding of the complexities of language planning by creating a visual model reflecting the interrelationships within and among aspects of language vitality. There are two immediate benefits to bringing an ST approach to language planning theory. First, this approach allows for the assimilation and incorporation of hypotheses and principles from the field’s forerunners into one qualitative model of language planning that uses consistent graphical language. Second, the ST approach allows for the creation of a model for language planning that is flexible and broadly applicable. ST can negate placing any one area of language vitality in a position of privilege by suggesting that each area in which a language functions is only one part of a metasystem.

1 WHAT IS LANGUAGE PLANNING?

Language planning (LP) is widely regarded as an area of overlap between applied and sociolinguistics. It is an area of study in which the researcher seeks to identify activity that would exert influence over the prevalence of a language. When the language being discussed by language planners is unspecified, as is the case of theoretical work in LP, we talk about LP for language X (Xish). The three areas that are traditionally addressed in language planning research are: status, corpus and acquisition (Kloss, 1967; Prator cited in Cooper, 1989). This tripartite of LP identifies broad categories through which LP activity can be initiated and is the foundation upon which subsequent LP research has been conducted, including the systems model of LP presented here. Any discussion of LP should begin with a clear articulation of this tripartite, but a systems approach will emphasize the interconnectivity of these three broad categories of LP.

1.1 Status planning

The term ‘status planning’ refers to any LP activity that focuses on changing the external functions and perceptions of Xish. Common subcategories through which status planning interventions operate are political status, economic uses, and cultural functions. This kind of LP does not immediately change the number of people using Xish, but changes the environment in which the language may be used in an effort to encourage or discourage language use. Additionally, we might consider that the mediums through which this LP activity manifests affect several aspects in which status planning operates. For example, we might consider how interventions in Xish entertainment mediums influence cultural and economic factors in unison by broadcasting images of Xish users, while creating jobs in the Xish language.
1.2 Corpus planning

The term ‘corpus planning’ refers to LP activity that focuses on changing the internal properties of Xish in order to influence its vitality. Corpus planning commonly refers to interventions aimed at the orthography, grammar, phonology and vocabulary of Xish. The two most readily identifiable examples of corpus planning are modernization and standardization. Such corpus planning is thought to aid in the LP process because we inevitably change how Xish users are able to function with their language when we alter its corpus through LP activity. It can therefore be said that corpus planning has direct repercussions on aspects of status (Haarmann, 1990).

1.3 Acquisition planning

The term ‘acquisition planning’ refers to LP activity that focuses on the transmission of Xish to non-users and to non-fluent users. This acquisition may occur inter-generationally or socially, but we should consider that LP activity may have more avenues for intervention in the public domain (i.e. through a formal education system). Literacy development initiatives, like the creation of educational materials, as well as issues of provision, like teacher training and classroom housing, are all concerns of acquisition planning. Acquisition has a clear and immediate impact on the vitality of Xish because it supports the learning of the language, but this area may also have an influence on the status of the language as it can alter the visibility of the language.

2 WHY DO WE NEED LANGUAGE PLANNING?

We have now considered the three main avenues for LP activity, paying heed to the interconnectivity of these areas. However, the need for LP has not yet been demonstrated. When the prevalence of one group of language users in a diverse language community is greater or lesser than desired, LP can be undertaken to alter this prevalence towards a stipulated goal. LP can occur either negatively or positively, depending on whether Xish prevalence is higher or lower than this stipulated goal. The systems model of LP presented here is able to account for both positive and negative LP because it identifies that a disparity variable (the disparity between the desired and actual proportion of Xish users) directly influences the balance of positive or negative LP activity. When the disparity value increases, more LP activities must be enacted to help adjust the actual population of Xish users toward a goal state that will lessen the disparity variable. The two modes through which LP operates, positive and negative, will be presented with attention being paid not only to how we determine which kind of activity is needed, but also to what kinds of repercussions LP activity in each mode might expect.

2.1 Positive language planning

Positive LP is the term used to identify any LP activity which aims to increase and/or sustain the prevalence of a language. Examples of nation-states that are currently engaging in positive LP include: Ireland (for Irish), and Canada (for French). We often talk about positive LP in relation to reversing language shift (Fishman, 1991), which is a specific kind of positive LP that focuses on languages that have lost their former vitality. Positive LP frequently aims to keep a minority or endangered language from falling into disuse and/or extinction, but it can also be enacted for majority languages in order to secure continued strength. Positive LP will generally attempt to increase the status and acquisition of Xish. This kind of LP may also use
corpus planning alongside status and acquisition activities, as a means of achieving the stipulated prevalence goal.

2.2 Negative language planning

Negative LP is the term used to identify any LP activity which aims to decrease the prevalence of Xish. Examples of nation-states that have previously engaged in negative LP include: the United Kingdom (against Celtic languages), and Canada (against Aboriginal languages). We often talk about negative LP in relation to the suppression of a minority language by a majority language group, but negative LP may also be enacted in coordination with positive LP efforts in order to couple the strengthening of a minority language with the weakening of a majority language. Negative LP will generally attempt to decrease the status and acquisition of Xish. Corpus planning is of less concern to negative LP than to positive, but again could conceivably be enacted in coordination with other kinds of LP activity in order to achieve the goal of lessening Xish prevalence.

![A Systems Model of Language Planning](image-url)
3 A NEW APPROACH TO LANGUAGE PLANNING

Thus far the tripartite areas of LP have been presented, with emphasis being placed on their interconnectivity. The general modes of LP activity, either negative or positive, have also been explained. The next subject to be presented, before an examination of the LP model is provided, is the Systems Thinking (ST) approach itself. ST is a way of thinking about phenomena—social, biological, or other—that places consistent emphasis on the relationships between variables. An ST approach to LP has not yet been incorporated into LP literature, but facilitates the creation of a comprehensive and cumulative model of positive and negative LP. In other words, the ST approach to LP has allowed the creation of the systems model of LP presented here because it is a methodology that embraces external influences.

The systems model of LP presented in this paper (see Figure 1) incorporates the traditional tripartite structure of LP activity and demonstrates both positive and negative LP initiatives. As has been discussed, the model determines the need for positive or negative LP activities by tallying the disparity between actual and desired population (or proportion) of Xish users within a diverse language community. In order to influence the actual population of Xish users, however, LP activities must influence the number of people acquiring and abandoning Xish. This influence can be direct or indirect. Indirect influences on acquisition and abandonment will first adjust the perceived attractiveness of Xish before influencing other variables. Whether directly or indirectly, the influence of LP activity on acquisition and abandonment must first manipulate intermediary variables: learning resources, political status, economic functions, corpus, and/or cultural functions. The success of LP activities, as presented in this model, is calculated by monitoring the extent to which interventions aimed at controlling acquisition or abandonment have influenced the actual population of Xish users.

3.1 Learning resources

Previously considered a concern of acquisition planning, learning resources that are promoted or discouraged through LP activity have a direct impact upon the acquisition of Xish by non-Xish users or by Xish users who are developing proficiency. Learning resources also influence acquisition and abandonment through the intermediary variable ‘perceived attractiveness’.

3.2 Political status

A subset of status planning, the political status afforded to Xish directly influences the attractiveness with which Xish is perceived. LP activity that manipulates political status affects Xish acquisition and abandonment only after having altered the perception of the language.

3.3 Economic functions

The economic functions of Xish, which were previously a concern of status planning, alter the perceived attractiveness of the language. Employment through Xish, consumerism in Xish, and the use of Xish in an international market are all factors included in this economic variable. LP activity can manipulate economic functions of Xish in order to change its prevalence. As with political status, economic functions only affect Xish acquisition and abandonment after having altered the perceived attractiveness of the language.
3.4 Corpus

Directly coordinating with corpus planning, as described in the original tripartite of LP, the corpus variable in this systems model of LP acknowledges that LP activity may alter the actual orthography, grammar, phonology, and vocabulary of Xish. Such changes in corpus, however, must have an impact upon the way in which the language is used (markers of status) before influencing the perceived attractiveness of Xish or its acquisition and abandonment.

3.5 Cultural functions

A subset of status planning, the cultural functions of Xish change the way in which the language is perceived. When LP activity changes the cultural function of Xish (whether ethnic, religious or other), these changes do not directly impact the number of people abandoning or acquiring the language. Instead, and as with political status and economic functions, these cultural manipulations have ramifications upon the perceived attractiveness of the language and this, in turn, alters the actual population using Xish.

4 TIME DELAYS IN LANGUAGE PLANNING

Change is not immediate. Particularly in the case of language use and acquisition, language planners must be aware that changes in Xish prevalence may take years or generations before manifesting. There are time delays between the initiation of an intervention (LP activity) and the response to that intervention by a corresponding variable (ultimately the actual population of Xish users).

5 SYMBOLS IN THE MODEL

The following systems model of LP consists of 10 parts: stocks, flows, clouds, valves, variables, causal links, positive polarity identifiers, negative polarity identifiers, goal-seeking loop identifiers and reinforcing loop identifiers.

5.1 Stocks

A stock, in systems modeling, is the accumulation of tangible or intangible things within a system. In this model, there is only one stock and it is bordered by a single-line rectangle. This stock is the actual population of Xish users and it is measured in people. We discuss the state of the LP system by calculating the level of this stock. To determine the efficacy of LP interventions we will need to compare stock values at an initial time point against subsequent measures.

5.2 Flows

A flow indicates movement of matter in and out of a stock according to the direction of its arrowhead. Flows are illustrated as straight double lines and represent the means and rates at which stock quantities alter. In this model, one flow demonstrates the increase in Xish users, while a second depicts the decrease in Xish users. As with the model’s stock, these flows must be measured in people, but with attention also being paid to time. Movement in and out of a stock through these flows must be measured in intervals and discussed in terms of rates.
5.3 Clouds

Clouds are symbols connected to flows that indicate that the precise source or means of departure for a stock is beyond the concern of the model.

5.4 Valves

Valves, which look like small hour glasses, lie along the path of flows and indicate the means by which and the rates at which stock quantities alter. In this model we can see that four variables: birth rate, acquisition of Xish, Xish abandonment, and death rate are all variables which directly influence valves controlling the flow of people in and out of the actual population stock.

5.5 Variables

Variables are any aspects that influence a rate of flow, like ‘corpus’ or even the ‘balance of positive vs. negative LP’ activity itself. In this model there are 14 individual variables that directly or indirectly affect the two aforementioned flows and stock and they are represented as word strings.

5.6 Causal links

Illustrated as a single curved line, causal links indicate the influence of one variable over another, according to the direction of their arrowheads. Causal links visually identify the interconnectivity that is at the heart of this systems model of LP.

5.7 Positive polarity indicators

A small positive sign adjacent to a causal link’s arrowhead indicates that if the causal variable increases then the impacted variable will also increase.

5.8 Negative polarity indicators

A small negative sign adjacent to a causal link’s arrowhead indicates that if the causal variable increases then the impacted variable will decrease.

5.9 Goal-seeking loop identifier

Illustrated as a circle with a vertical/horizontal cross in its centre, the goal-seeking loop identifier indicates that the polarity of its causal loop is negative and, therefore, operates to move the system to a goal state. This goal state is determined by reference to the system’s stock, in this case the actual population of Xish users.

5.10 Reinforcing loop identifier

Illustrated as a circle with a diagonal cross at its centre, the reinforcing loop identifier indicates that the polarity of the causal loop is positive and, therefore, operates to move the
system to an exponential growth/decline with reference to the system’s stock, in this case the actual population of Xish users.

6 CONCLUSION

This article proposes a new model of LP which is founded in the ST method. It has placed this model within the corpus of literature on LP theory and explained both the components of the traditional tripartite of LP as well as the elaborated variables contained within. The purpose and means by which positive and negative LP operate have also been presented in the model and accompanying article. Finally, the component parts of the model, the symbols and codes through which its message has been articulated, have been described in detail. The benefits of bringing the ST approach to LP are twofold: first, this method allows for the accumulation of diverse theories into one model, and second, the model itself is operational and is able to identify means and causes of LP activity in a visually accessible medium.

REFERENCES


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