Understanding the Transforming Biopolitics:

Shifts and Continuation in the Official Discourse of Birth Planing Policy in China,

1956-2003

1. Data

My analyses are based on a corpus containing all articles on birth planning that were published in *People's Daily (Renmin ribao)* during 1956-2003. As the mouthpiece of the Central Committee of the Chinese Communist Party (CCP), *People's Daily* serves to transmit messages from state to society (Wu 1994). Bearing the function of "propaganda, organization, mobilization and control" (ibid., p.194), *People's Daily* is an important analytical material representing the official discourses of major policies in China.

The articles of the corpus are drawn from the Electronic database of *People's Daily* (1946-2003)[1] that includes all articles published in *People's Daily (Renmin ribao)* between 1946 and 2003. I select articles into the corpus based on two criteria: (1) the title of the article should include one of the following words: birth planning, population, childbearing, birth control, prenatal and postnatal care, allow to give birth, marry and bear children late, sex ratio, over birth, two children and quality care service; (2) the body of the article need to include one of the following words: birth planning, population, childbearing, birth control, prenatal and postnatal care, allow to give birth, marry and bear children late, sex ratio, over birth, two children, quality care service, fertility policy, fertility rate, population size, population growth, population quality, population control, health of mother and baby, reproductive health and contraception. I came up with these two criteria after tuning different searching conditions on the database to ensure that

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[1] Accessed through Tsinghua University Library (http://rmrb.lib.tsinghua.edu.cn:918/WEB/INDEX.html)

the articles that are most relevant to the birth planning policy are selected to build the corpus.

Table 1 demonstrates the composition of the corpus containing articles extracted from the

database based on the criteria listed above.

Table 1. The Composition of the Corpus

	Article Count	Word Count
Front Page	255	95968
Other pages	1557	484488
Total	1812	580456

2. Method

This study focuses on the official discursive framings that embody biopolitical policy

tendencies in terms of the rationalization and implementation approaches in order to decode

China's transforming biopolitics. While previous works on this topic all solely rely on qualitative

methods, this study adopts a computational grounded theory framework to mitigate the

shortcomings of both qualitative and computational content analysis through inductively

identifying and meaningfully interpreting discourse patterns (Nelson 2017). The three-step

computational grounded theory framework includes a computationally-based pattern detection

step that allows pattern emerges in an unbiased and reproducible fashion, a pattern refinement

step of computationally guided deep reading of typical texts and a pattern confirmation step that

uses different computational techniques to evaluate the validity of the inductively detected

patterns (ibid.).

In the first step, I relies on the Latent Dirichlet Allocation (LDA) topic modeling, an

unsupervised learning method that has potentials to either confirm existing theories or discover

unknown categories and patterns not immediately apparent to human readers. (Blei 2003; Evans

2016; Nelson 2017; Nelson, Burk, Knudsen and McCall 2018). I divide the corpus into three time periods: before open up and market reform (1956-1978), the 1980s (1979-1989) and the 1990s until the end of Jiang's rein (1990-2003). The first period contains only 71 articles, compared with the 806 articles for the second period and the 935 articles for the third period. The underlying reason for this article distribution pattern will be explained in the next section. Though the temporal distribution of articles is extremely skewed for this classification, I still choose to compare these three time periods with theoretical grounds. In the first period (1956-1978), the People's Republic of China was just established and ruled under a socialist economic and political system with Mao Zedong as the top leader. The second period (1979-1989), corresponding to Deng Xiaoping's rein in China, started by China's Open up and Market reform, during which a significant regime and social transition took place in China. The third period, roughly corresponding to Jiang Zemin's rein (1993-2003) in China, during which China was quite comprehensively marketized, fully restored international connections that were cut off during the cold war and started on the breathtaking economic boom.

I fit a LDA model for each of the three time periods to identify and compare the four dominant discourses of each period in order to track the shifts and continuation in official birth planning discourse over time. After examining the weighted word lists for a number of models with different topic numbers ranging from 4-10, I choose the the model with 4 topics, as it produces the most substantively interpretable topics, which is considered as the most important criterion to determine the number of topics (DiMaggio 2015; Nelson 2017). At the first glance, it seems to be more appropriate here to adopt the dynamic topic models (DTM) to discover evolving narratives in unstructured text (Blei 2006). Yet I ran DTM on the corpus and found that it performs poorly

in addressing my research question, as it could only identify recurring topics for all time periods and trace their evolution, while ignore topics that only occur in certain time periods. So I stick to the design of comparing the LDA results for each time period, which could both examine the evolution of recurring discourses and identify distinctive discourses of each time period.

In the second step, I conduct deep reading on documents that are identified by the LDA as most representative of each discourse in order to confirm the validity of the computationally identified patterns, interpret the patterns in meaningful ways, and "potentially modify the identified patterns to better fit a human, and holistic, reading of the data" (Nelson 2017, p.23). The third step might not be conducted in this paper, as I plan to expand the corpus and then apply supervised machine learning method as the validation tool to test the patterns I found in step one. Throughout the whole process, I would relate the computational results to theory and previous empirical findings on this topic. I would describe the evolution of the official birth planning discourses and analyze how it reflects the historical, political and social changes that shape the transforming biopolitics in China.

3. Initial Results

3.1 An Overview: the Coverage of Birth Planning in *People's Daily*

I start by presenting the temporal distribution of articles on birth planning in *People's Daily*. The frequency of the issue's appearance in *People's Daily* reflects its relative significance in the central governmental agenda. The phrase "birth planning" first appeared on *People's Daily* in 1956. As shown in Figure 1, the very first uptick seemed to have eventually gained enough momentum and support to be implemented as a policy after Mao Zedong, the founding father and top leader of China at that time, publicly expressed an affirmative attitude towards it in 1957.

Figure 1. Temporal Distribution of Articles in the Corpus, 1956-2003
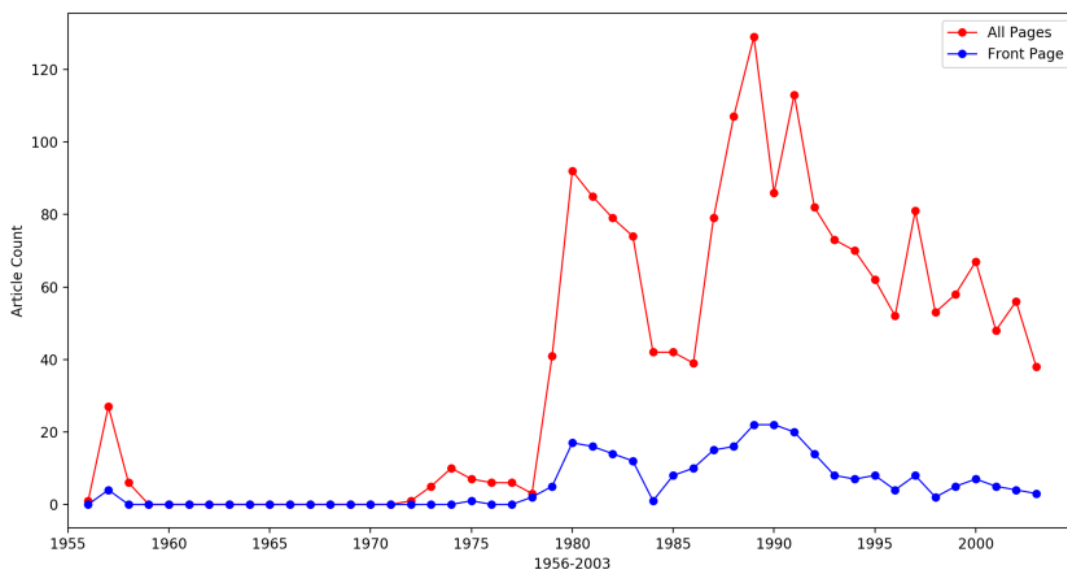
Yet from Figure 1, we could observe that the article number soon declined to zero in 1958 and 1959, as a result of the "anti-rightist" movement, in which the pro-birth-planning officials were fought against as "rightists". The number of articles soon declined to zero in 1958 and the issue disappeared from *People's Daily*'s coverage throughout the whole 1960s. Nonetheless, it was still advocated in early and mid 1960s, though less openly and limited in scope.

In the 1950s, the biopower governing reproduction in China operated mainly at individual level. In the official tone, birth planning was narrated chiefly as an individual-level action and implemented merely as a recommendation for individuals guiding their reproductive behavior (Greenhalgh and Winckler 2005). The policy was more often framed as "birth control" (*jiezhi shengyu/jieyu*) rather than "birth planning"(*jihua shengyu/jisheng*) in the 1950s. In relevant discursive practices, "Birth control" was often aligned with individual behavior, while "birth planning" was normally referred to policy for or action of the whole population. As shown in Figure 2, the total word frequency of "birth control" in the corpus is more than four times the

Figure 2 Word Frequency of "Birth Planning" and "Birth Control" in the Corpus
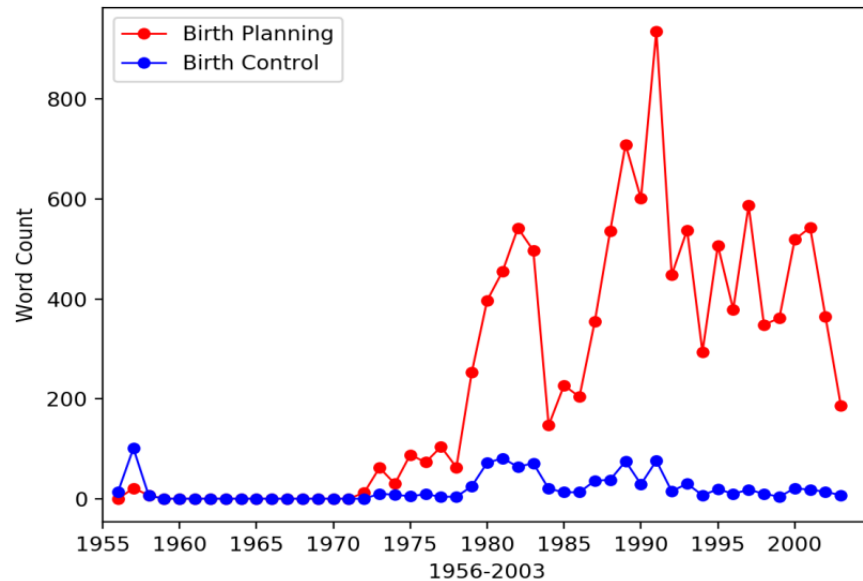

frequency of the phrase "birth planning" in the 1950s, while "birth planning" appeared far more frequently than "birth control" after the 1970s. Clearly, the biopower had deepened and formalized its endeavor into aggregate level after its emergence at individual level in the 1950s.

After being completely interrupted by the Cultural Revolution, the birth planning agenda reemerged as a focus in *People's Daily* since 1972, roughly the starting point of the policy's re-initialization. The article number soared in 1979 and remained high in early 1980s, propagandizing for the stringent One-Child Policy. The trend of *People's Daily*'s coverage of the birth planning agenda supports the thesis that population and reproduction have become of central concern to the CCP from the late 1970s to the 1990s (Greenhalgh and Winckler 2005). During this period, the birth planning policy was established as a basic national policy (*Jiben Guoce*) and first written into the constitution of China. The relative decline of article number in the mid 1980s corresponds to the relaxation of the policy in that period, as shown in Figure 3.

The resulting increasing fertility rate (displayed in Figure 4) brought about the re-enforcement

Figure 3. Number of birth-control operations in China, 1971–2006
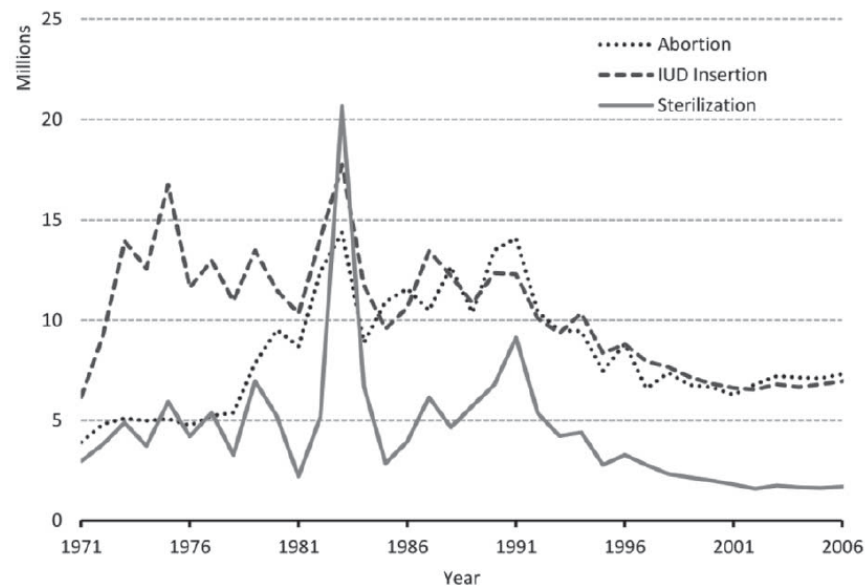
Source: Ministry of Health of China. 2010. *Zhongguo weisheng tongji nianjian* (China Health Statistics Yearbook). Beijing: Peking Union Medical College Press.

Figure 4 Total fertility rate trends in China, 1951–2011
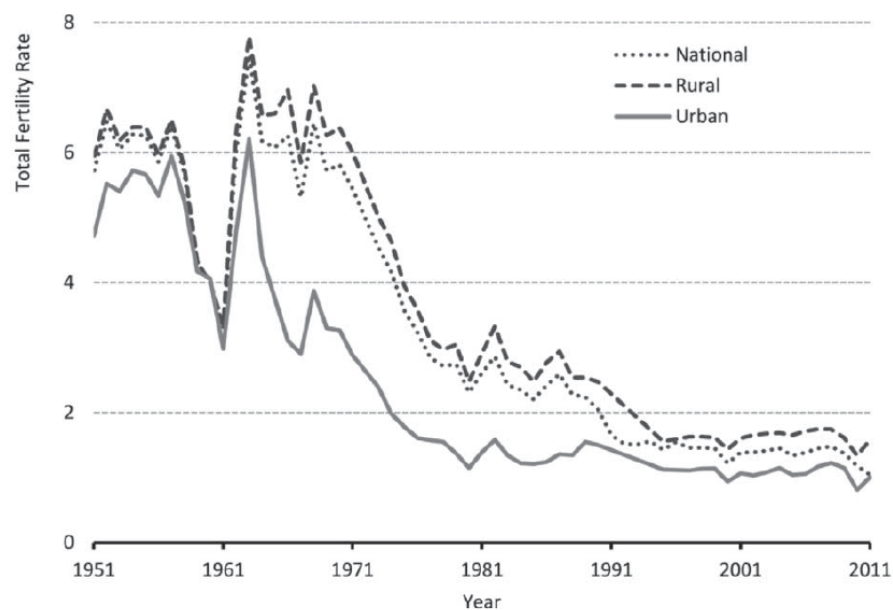
Source: Whyte, Feng and Cai, 2015. "Challenging Myths about China's One-Child Policy." *China Journal*, 74 (1) :144-159.

of the policy in the late 1980s, which explains the explosive growth of article number at the end

of 1980s. With fertility rate fallen below the replacement level in the 1990s, the coverage of the

birth planning agenda in *People's Daily* continued a declining trend after its peak in 1989.

3.2 Shifts and Continuation in the Official Discourse of the Birth Planing Policy in China

Figure 5, 6 and 7 demonstrate the dominant birth planning discourses of the pre-market-reform period (1956-1978), the 1980s (1979-1989) and the 1990s until the end of Jiang's rein (1990-2003), respectively. Each graph of each figure show the top 20 key words that define the discourse with the weights of the words for the discourse and the counts of the words in the whole corpus.

As Shown in Figure 5, the first and third strand of discourses of the pre-market-reform period all seem to justify the birth planning agenda by pointing out its benefits in promoting productivity growth and socialist economic development for the newly-born Chinese nation that is marked by quite unchecked population growth. The difference between the two is that the former narrates in a more general sense on the broad socialist planning and national economy level, while the latter specifically discuss the accumulation of productivity in industry and agriculture. The second branch of discourse seems to match to the revolutionary discourse identified by Greenhalgh and Winckler (2005) that propagates the birth planning project on the grounds of women's liberation under socialism and the revolutionary rupture from "the feudal past". It also aligns with the prevalence of the revolutionary and mobilizational implementation approaches for the birth planning policy during the Mao era (ibid.). The fourth branch of discourse in the pre-market-reform period rationalizes the planning of birth by stressing how it could relieve the burden and raise the quality of individual life and work.

As for the 1980s, shown in Figure 6, the economic development discourse persists as a major narrative rationalizing the birth planning policy. The difference between the economic

Figure 5 The Major Discourses with Top Keywords Weights and Counts for 1956-1978
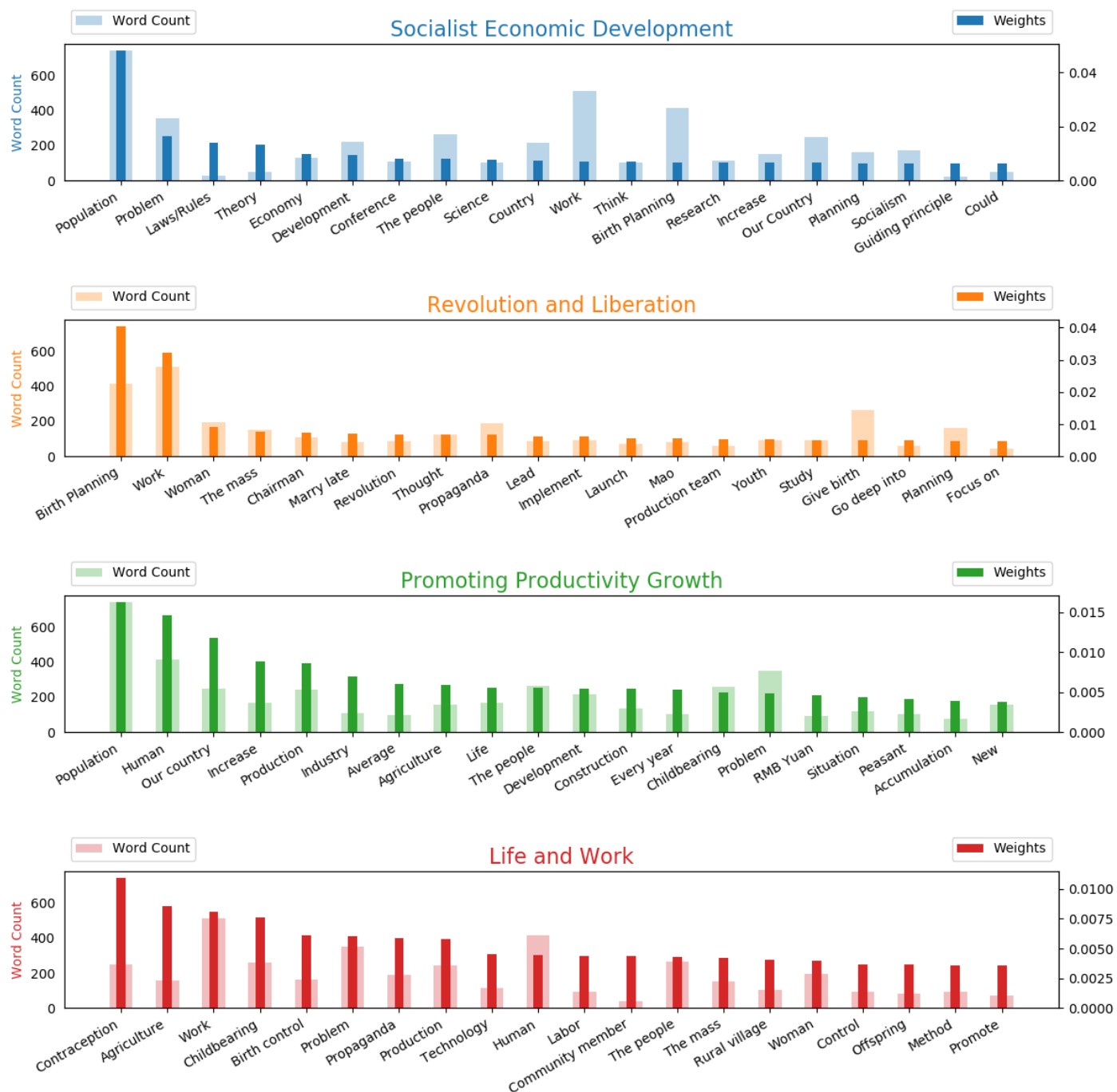
development discourse in this era and that in the pre-market-reform period is that in this era the

huge population seems to be explicitly framed as a serious problem burdening economic growth.

Besides, the narration in this era goes in a more scientific manner with more numbers and

calculations. These changes all manifest the post-Mao leaders' strong desire to increase the per capita economic growth rate as soon as possible, since economic performance legitimacy has replaced ideological legitimacy after the collapse of the revolutionary regime in China (Greenhalgh 2001, 2009; Whyte, Feng and Cai 2015; Zhao 2009). The first branch of discourse in the 1980s frames the population problem as a common challenge for the whole human beings

Figure 6 The Major Discourses with Top Keywords Weights and Counts for 1979-1989
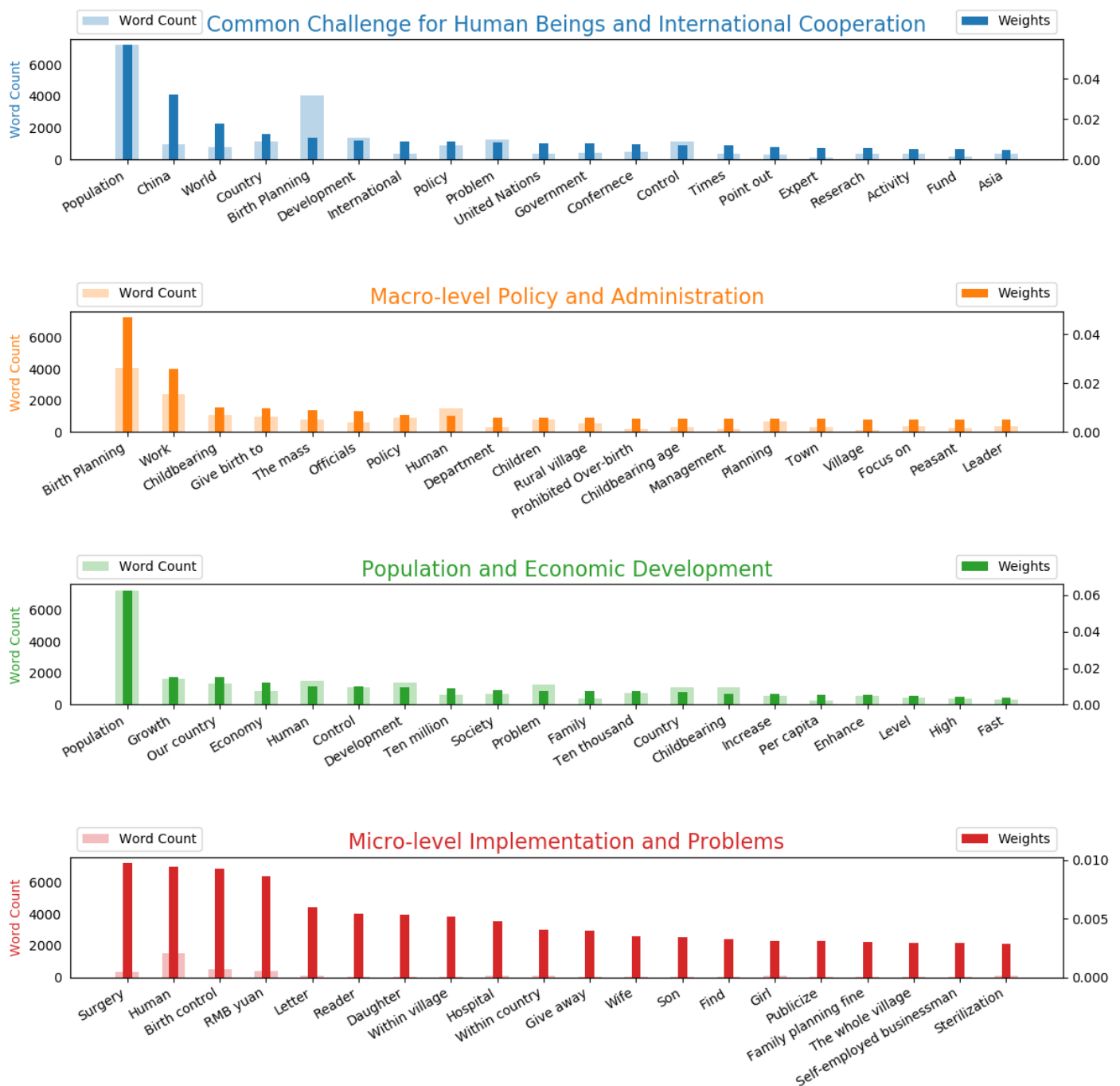
Figure 7 The Major Discourses with Top Keywords Weights and Counts for 1990-2003

and mentions a lot about the international cooperation on tackling the population problem. It reflects China's Reform and Open up policy and re-integration into the world in that era. The second and the fourth strands of discourses are all about the implementation of the birth planning

policy. The second discourse focuses on the macro-level policy and administration. Comparing to the revolutionary and mobilizational approaches in the last era, the bureaucratic approach came into play in this era (Greenhalgh and Winckler 2005). The fourth discourse focuses on the micro-level implementation of the policy and its related problems, such as the prevalent conflict between the son preference culture in the rural village and the stringent one child policy.

In the 1990s, as shown in Figure 7, the recurring economic discourse incorporates the environment and resources protection elements, corresponding to the "sustainable development" discourse which have emerged and proliferated since the late 1990s (Greenhalgh 2009; Greenhalgh and Winckler 2005). Another distinctive discourse of this era is the framing of the birth planning project as the "Quality Care Services" (*youzhifuwu*), in other words, "human-centered reproductive health services", which center upon improving women and new-born children's health through providing women with better health-related counseling, education and more informed choice of contraceptive methods (Attané 2002). Relatedly, the third branch of discourse in Figure 7 shows how biopolitics in this era was identified with more indirect regulation of reproduction through individual economic and wellbeing incentives, professional advice and services on health, as compared with the overt and coercive bureaucratic intervention into people's lives in the 1980s. The second discourse, focusing on the micro-level implementation of this era, incorporates regulation on the flowing rural migrants, which reflects the peak of the great internal migration in China (Liang 2016).

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