Dialog on language change

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Early probing:

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To model and to quantify:

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Lexical Diffusion - an early model

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U	V	C
W1		W1
W2	W2 ~ W2	
W3	W3 ~ W3	
.	,	
.	.	
.	.	
Wn	Wn	

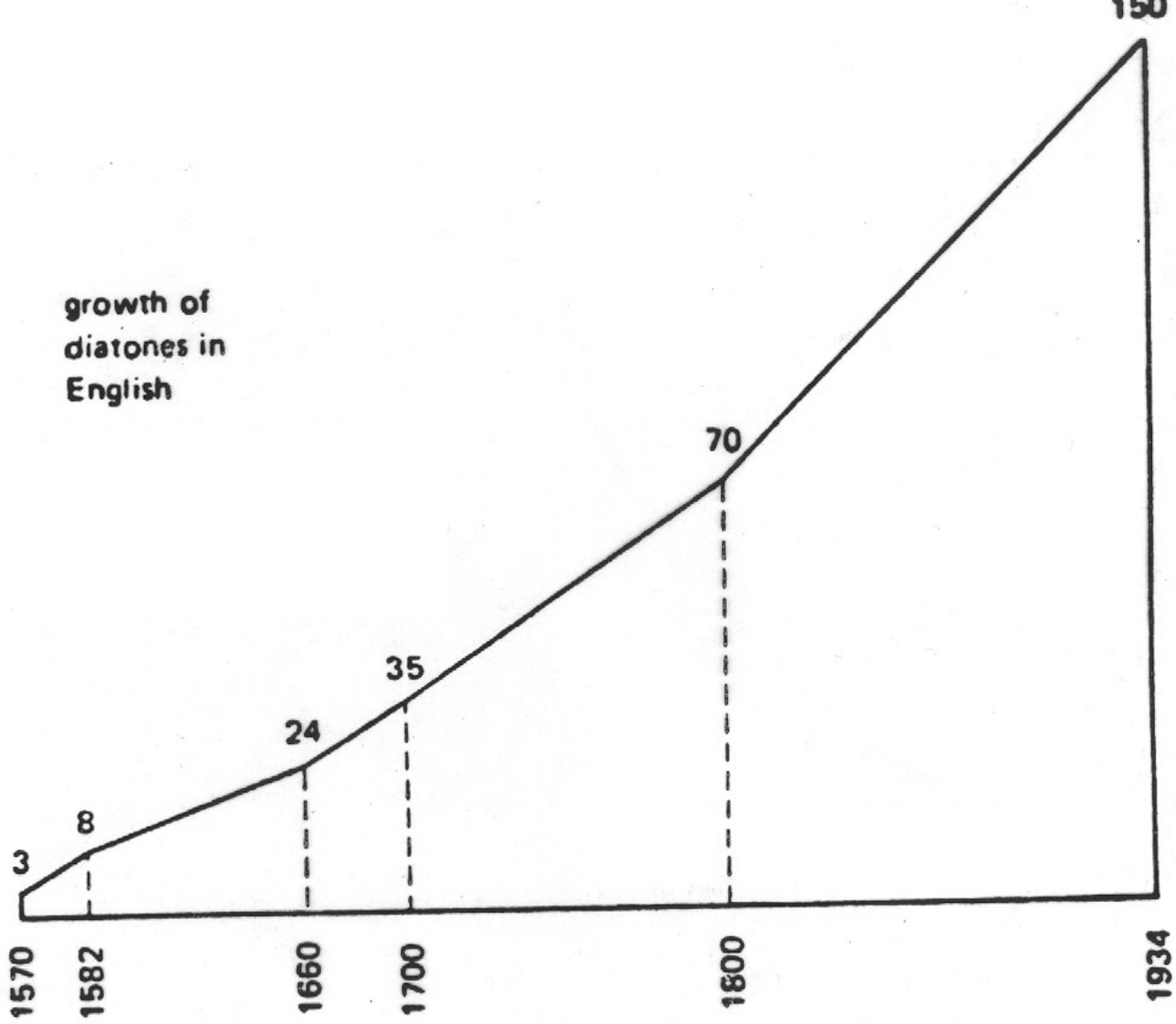

Figure 2: The chronological profile of diatone formation in English. Based on Sherman, 1975.

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Table 2. The 84 words investigated, among them 28 are the /ã/ words and the rest 56 words are the /ɑ̃/ words.

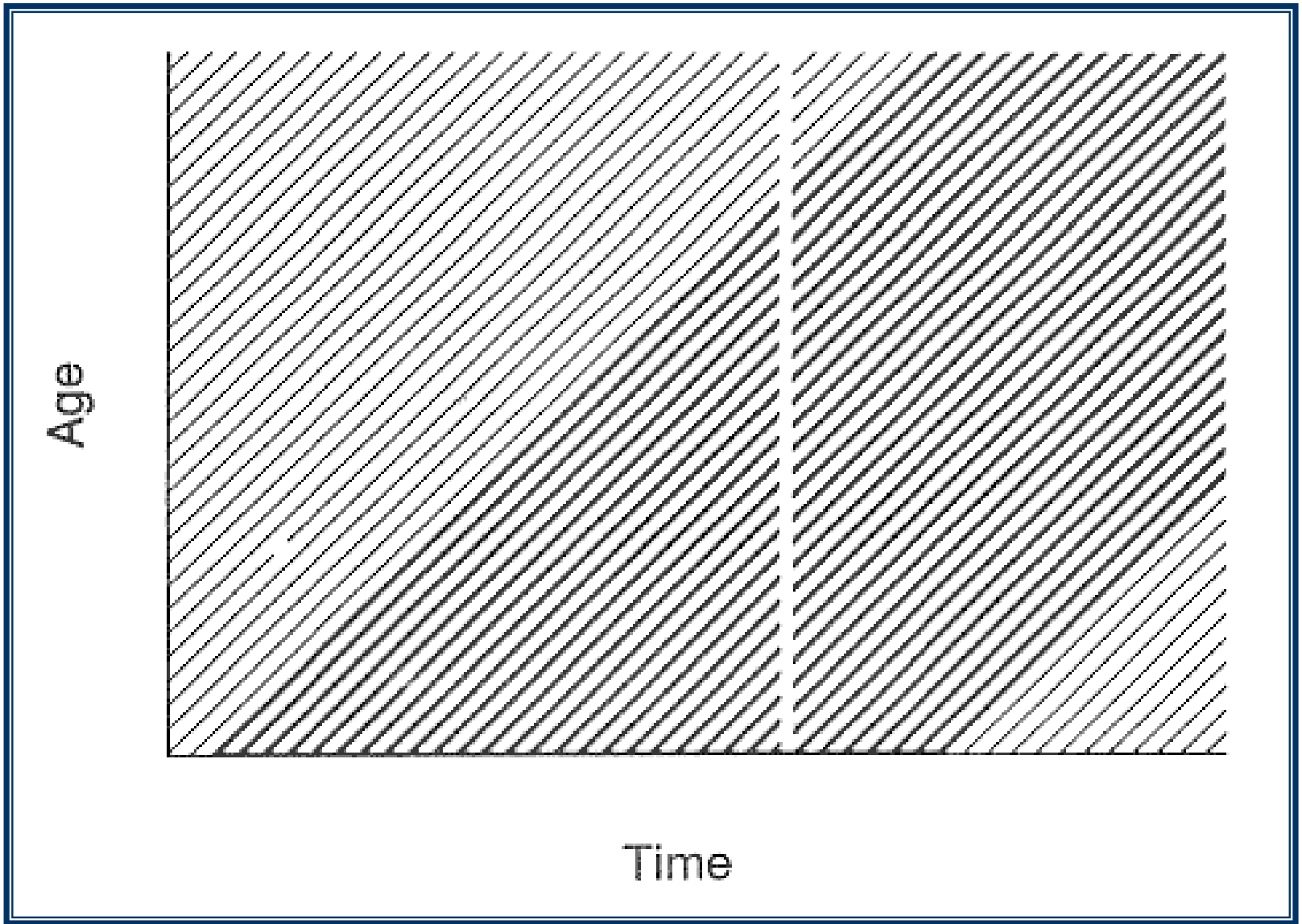
/ã/			/ɑ̃/			
1 浜	15 畅		1 帮	15 庄	29 倡	43 撞
2 用	16 生		2 邦	16 章	30 创	44 刚
3 棚	17 省		3 当	17 桩	31 梁	45 钢
4 彭	18 长		4 棒	18 樟	32 霜	46 江
5 班	19 肠		5 庞	19 装	33 商	47 讲
6 蚌	20 丈		6 傍	20 掌	34 伤	48 港
7 垂	21 剩		7 比	21 壮	35 双	49 康
8 猛	22 姜		8 荐	22 葬	36 嗓	50 糠
9 打	23 耕		9 涎	23 障	37 赏	51 航
10 冷	24 哽		10 盲	24 状	38 床	52 项
11 张	25 坑		11 党	25 窗	39 裳	53 杭
12 帐	26 鹅		12 当	26 昌	40 上	54 航
13 撑	27 樱		13 郎	27 闯	41 藏	55 降
14 厂	28 杏		14 狼	28 唱	42 缸	56 行

Type 1

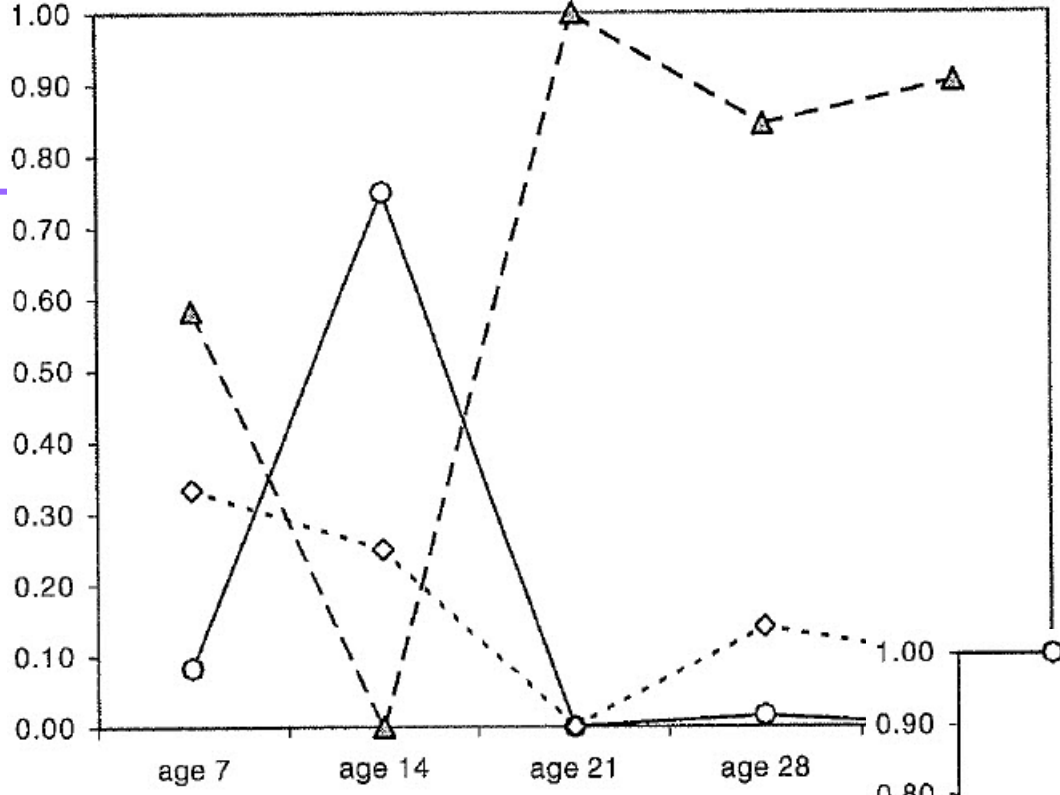
W1 /Cɑ̃/	W2 /Cã/	W3 /Cã/	1	2	3	0

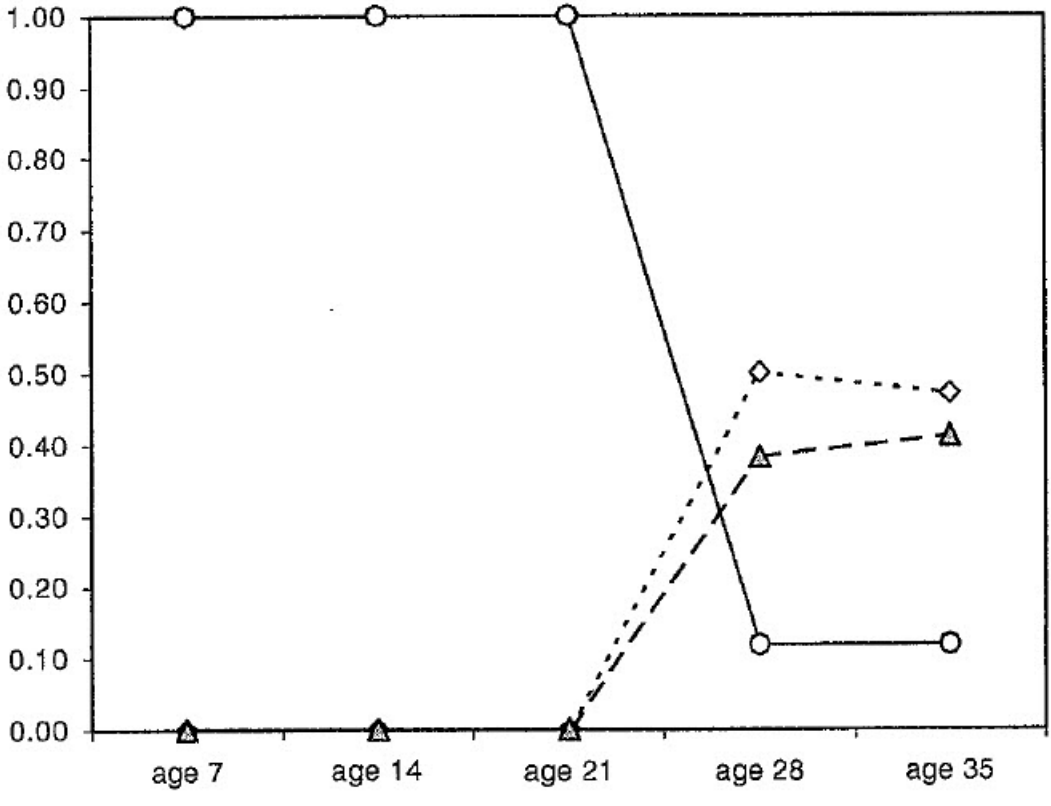
C = any consonant

Age as Virtual Time



Critical Period & Individual Variation.





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Adolescents, Young Adults,
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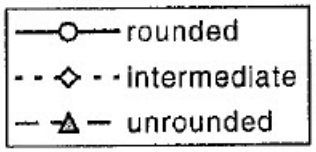
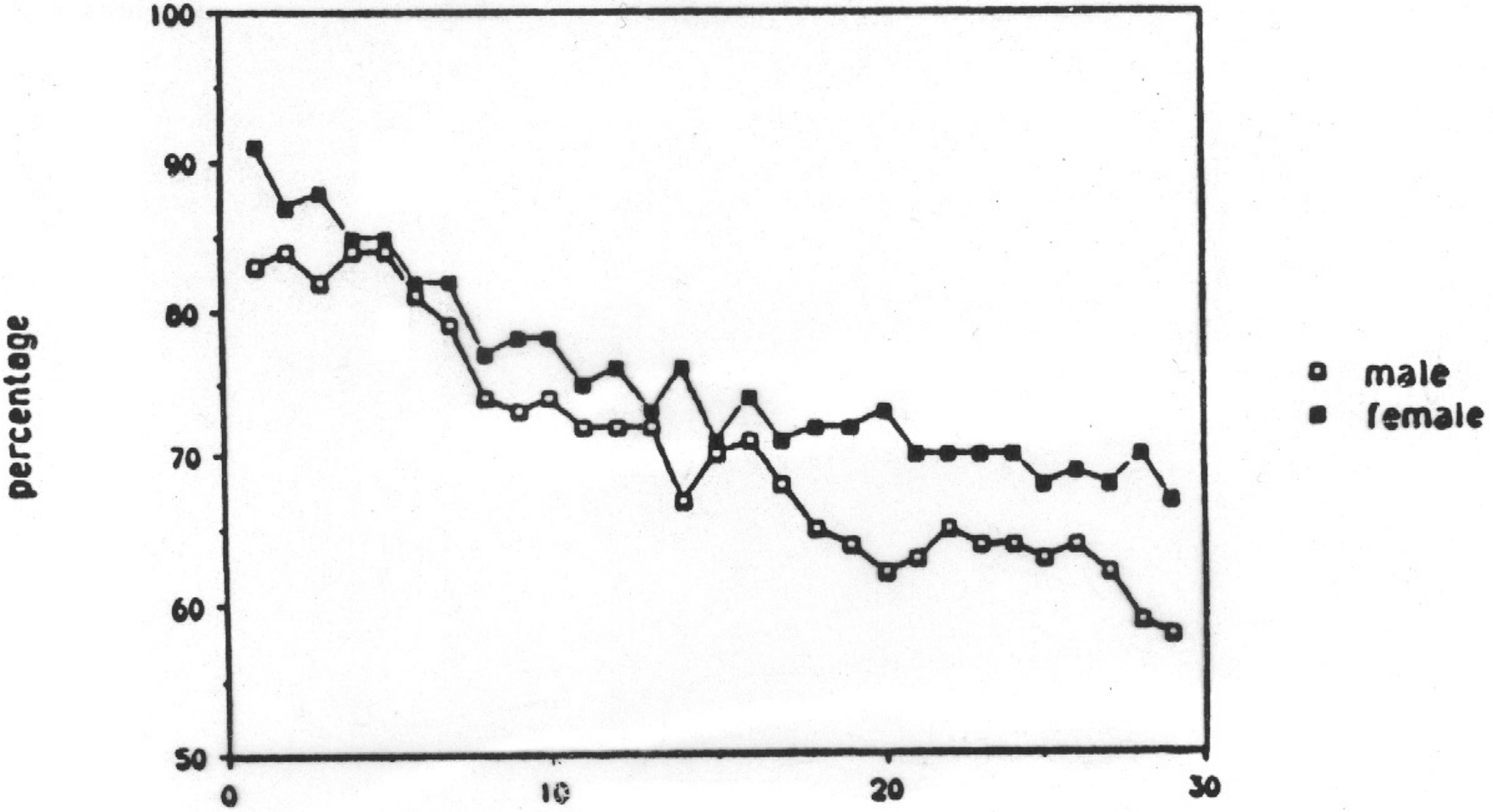
Two Case Studies from "Seven Up".
Tables 7.4 and 7.5.



Females lead males for each word undergoing change.

Figure 6. Gender comparison in the 28 /ã/ words.



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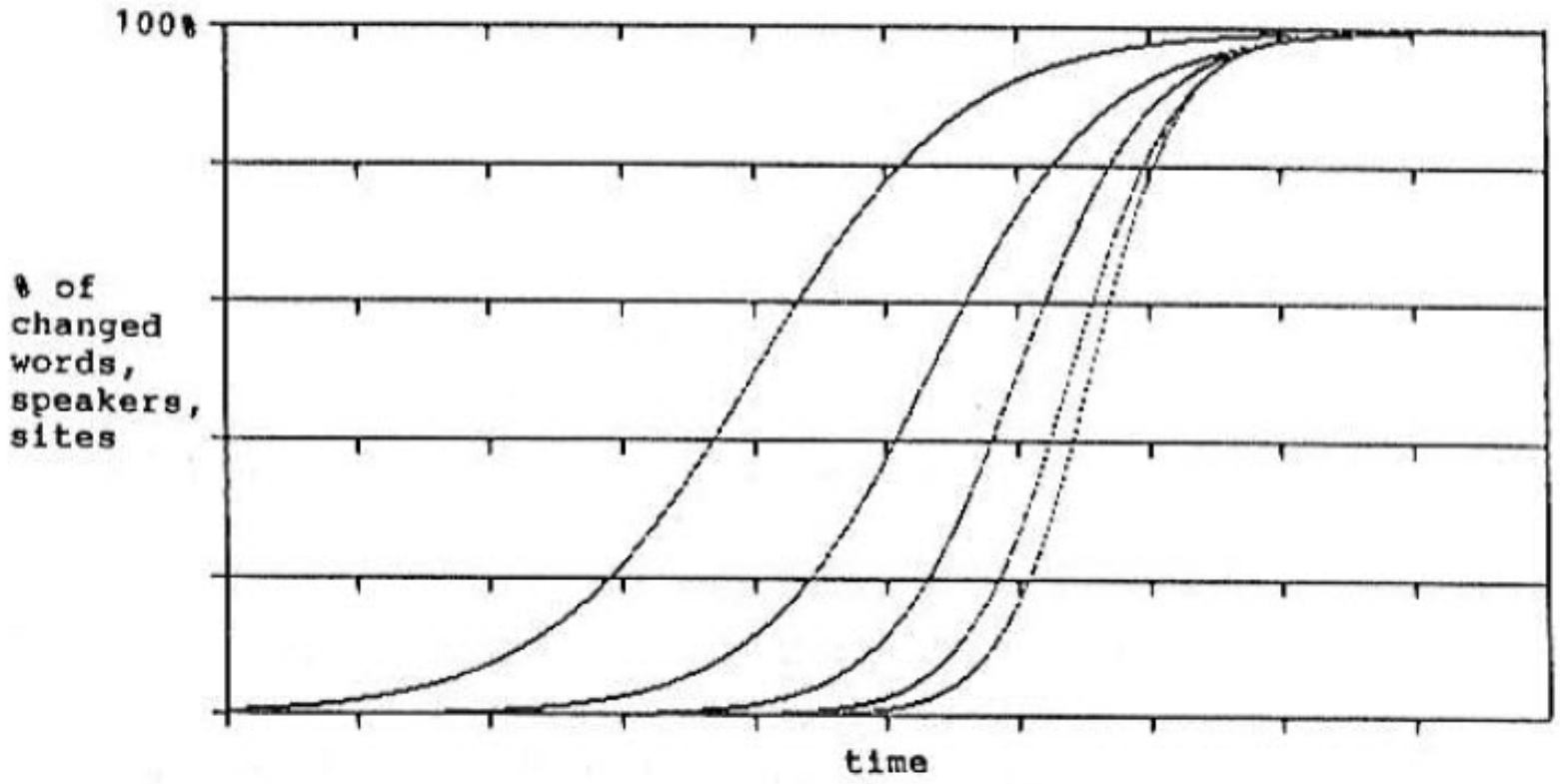

Figure 2: An idealized diagram of snowball effect in W-diffusion and S-diffusion.

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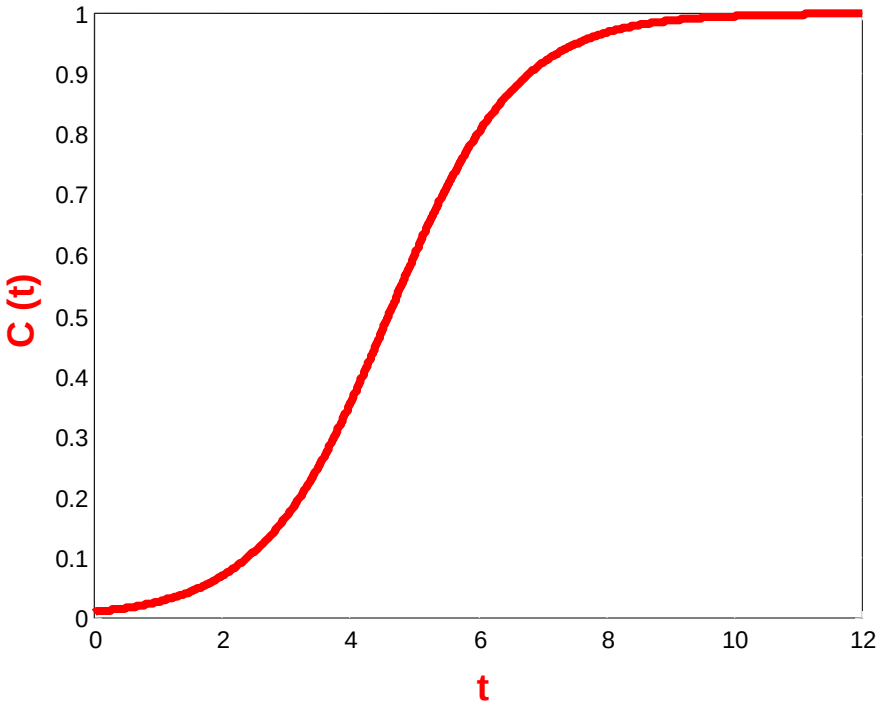
$$c(t) = \varepsilon \frac{e^{\alpha t}}{1+\varepsilon\left(e^{\alpha t}-1\right)}$$



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