The Uses and Abuses of Dysfluencies

An essay on the identification of "avoidance dysfluencies" in people who stutter

(Revised March 2022)

By Paul Brocklehurst PhD.

Director of The Stammering Self-Empowerment Programme www.stammeringresearch.org

Introduction

Many of the abnormal dysfluencies produced by people who stutter are not primary symptoms of stuttering. On the contrary, they are actually subtle avoidance behaviors that we have learned to employ in order to avoid stuttering. I call such dysfluencies "avoidance dysfluencies", and unlike the primary symptoms of stuttering we do have some direct control over whether or not we produce them. In this essay I shall explain why, in order to successfully manage stuttering and achieve a more optimal level of communication, we need to be able to identify, and as far as possible, eliminate these avoidance dysfluencies from our speech. This is no easy task, because many avoidance dysfluencies sound identical to the "normal dysfluencies" that are produced by speakers (both stutterers and non-stutterers alike) when trying to formulate what they want to say. However, whereas normal dysfluencies play a useful and important role in facilitating successful communication, the net effect of avoidance dysfluencies is entirely negative, not least because they sustain or even increase our fear of stuttering and prevent us from learning to cope with stuttering in an adaptive way.

In this essay I explain in detail the differences between normal dysfluencies and avoidance dysfluencies and precisely why normal dysfluencies are beneficial and avoidance dysfluencies are harmful. I then discuss my experiences of trying to eliminate avoidance dysfluencies from my own speech, and also of trying to help other people who stutter to eliminate them from their speech.

Distinguishing between normal and avoidance dysfluencies

As mentioned in the introduction, to an outside listener, avoidance dysfluencies may sound identical to normal dysfluencies, and in many cases, it is impossible for listeners to distinguish between the two. The difference between these two types of dysfluency lies not so much in their form (i.e., in what they sound like), as in the reasons why they occur. Essentially, speakers produce *normal dysfluencies* when they experience slowness or difficulty finding the words they want to say or difficulty formulating those words into sentences, such that, when an appropriate moment comes to speak, they find themselves not ready, and therefore unable to proceed.

¹ Avoidance dysfluencies could be classified as secondary symptoms of stuttering.

The most basic sort of normal dysfluency is a silent (i.e., unfilled) pause that continues on a little longer than it should. Listeners are likely to perceive such pauses as hesitations. Because such silent pauses pose opportunities for other people to butt in, speakers frequently fill them with some sort of noise. Such "filled pauses" signal to listeners that the speaker is still trying to speak, and in so doing, they help the speaker to buy some extra time to complete the formulation of what he wants to say. So, for example, rather than remaining silent, speakers may repeat or prolong some of their previous sounds or words, or they may utter some special "filler" words, or phrases, to fill the gap until they have formulated what they want to say and are ready to continue on. Essentially, all of these normal dysfluencies constitute stalling strategies that speakers normally adopt when they find that they are a bit slow at formulating what they want to say or are having word-finding difficulties.

Exactly the same range of stalling strategies (silent pauses, filled pauses, repetitions, prolongations etc.) that constitute normal dysfluencies can also be used as *avoidance dysfluencies* to avoid stuttering. That's why it's so hard for listeners to tell the difference between the two. However, unlike normal dysfluencies, avoidance dysfluencies are produced exclusively by people who stutter. We produce them as a delaying tactic when we anticipate that we will stutter on a word, in the hope that, if we delay the feared sound or word long enough, we may be able to avoid stuttering on it.

In contrast, speakers are not trying to avoid anything when they produce normal dysfluencies. On the contrary, they are busy formulating what they want to say².

Normal dysfluencies fulfil important communicative functions

Bearing in mind how difficult it is to distinguish between normal dysfluencies and avoidance dysfluencies, you may wonder whether it would be easier simply to stop producing both forms of dysfluency. The reason why this is not a feasible option is because normal dysfluencies fulfil some important functions and are necessary for successful communication. Research into the role of normal dysfluencies in communication has repeatedly found that speech that is devoid of such dysfluencies is harder for listeners to pay attention to, harder to understand, and harder to remember. Research has revealed that normal dysfluencies orient the listeners' attention and alert them to the likelihood that the speaker is about to say something difficult or unusual. This heightened attention causes listeners to focus strongly on the words immediately following the dysfluency. Normal dysfluencies also slow down the rate at which a speaker can deliver his message; and, because they tend to occur at points that are critical for understanding the sentence as a whole, the slower rate of delivery at these points provides listeners with exactly the extra time they need in order to process what they have heard.

The majority of research into the roles of normal dysfluencies has focused on filled pauses such as um, uh and err³. Although some researchers have found minor differences in the effects of different types of filler, it seems likely that all forms of normal dysfluency have much the same positive effects

² Although most avoidance dysfluencies involve slowing down (stalling) before feared words, some people who stutter develop the habit of speeding up before feared words. This is also a form of avoidance dysfluency. The symptoms produced as a result are less likely to be mistaken for normal dysfluencies, but may resemble cluttering.

³ See the bibliography at the end of this essay for further reading on this topic.

on listeners' attention and on their comprehension and retention in memory of words and information that immediately follow such dysfluencies. The one notable exception to this is silent pauses. Although in monologues, for example, when preaching or delivering a speech, silent pauses can be used to great effect⁴, in conversational settings listeners often perceive silent pauses as opportunities to steal the floor – to butt in and start talking. This is especially likely to happen if a child or a speaker of low social standing produces silent pauses, and it is also especially likely to happen when speaking over the telephone (because the listener may not realize that the speaker is still trying to speak). Consequently, in conversational settings, silent pauses tend to reduce the speaker's communicative effectiveness, whereas filled pauses tend to enhance it.

The misuse of dysfluencies by people who stutter

Although they may not be consciously aware of it, speakers (both stutterers and normally-fluent speakers) learn early in their childhood that filled dysfluencies (including repetitions, prolongations and interjections) help to hold the listeners' attention and can be used as stalling strategies to hold the floor and buy some much needed extra time while trying to formulate what they want to say. The use of these filled dysfluencies quickly develops into a habit and speakers soon find themselves producing them automatically, without making conscious effort to do so. This behaviour is absolutely normal and completely fine while experiencing formulation difficulties or word-finding difficulties. However, using filled dysfluencies (or for that matter even silent pauses) to maintain listeners' attention while trying to avoid anticipated stuttering is not beneficial. On the contrary, it is positively detrimental. I will clarify the reasons below.

Why using avoidance dysfluencies in response to the anticipation of stuttering is unhelpful

If we anticipate that we will stutter on a word and, as a result, we employ one or other of the forms of avoidance dysfluency described above, sometimes we will find that, when we come to attempt the feared word, we do not stutter on it after all. Each time this happens, it feels like the avoidance dysfluency has enabled us to successfully avoid stuttering. Consequently, our tendency to produce avoidance dysfluencies before feared words is reinforced and becomes a habit. However, stalling (or rushing ahead) before feared words does not always enable us to avoid stuttering on the feared word. When it doesn't work, it adds to the problem because, at such times, instead of simply getting stuck on a feared word in a straightforward way, we now become dysfluent before the feared word and then get stuck on it as well. In this way, the avoidance dysfluencies we habitually use to avoid stuttering themselves become secondary symptoms of stuttering.

Also, there is a further problem with using avoidance dysfluencies before feared words... Although we often correctly anticipate when we will stutter, we don't always get it right. Research into the anticipation of stuttering has shown that people who stutter in fact experience many false alarms – instances when, after anticipating that they will stutter, they do not stutter after all. Indeed, research on children who stutter (who have not yet developed the tendency to use avoidance dysfluencies before anticipated stutters) suggests that these false alarms happen regularly.

3

⁴ Martin Luther King's famous "I have a dream" speech provides a good example of the power that silent pauses can have when skillfully used.

Importantly if, in our desire to avoid stuttering, we use avoidance dysfluencies every single time we anticipate that we will stutter, we never give ourselves the chance to find out whether or not we would really have stuttered had we not used them. As a result we are very likely to develop the false belief that... "if I don't use avoidance dysfluencies when I anticipate stuttering, I will definitely stutter".

The benefits of acceptance of stuttering and of a pragmatic attitude towards dysfluencies.

Probably one of the main reasons why people who stutter start to produce avoidance dysfluencies when they anticipate upcoming stuttering is because stuttering is not a pleasant experience. It is something most of us would rather avoid if we possibly could. So, as long as we harbour the belief, or hope that, by producing avoidance dysfluencies, we can avoid stuttering, the temptation to try to do so will be difficult to resist. One way through this dilemma is to treat stuttered dysfluencies (the primary symptoms of stuttering) as if they are essentially unavoidable. If we can consider them in this way, then we will find ourselves more able to simply let them happen. Essentially, if we accept that we cannot avoid them, we are less likely to try to do so. Consequently, we can then focus our attention on finding ways of ensuring that they cause minimum disruption to our flow of speech. Essentially, I'm suggesting that we can make a sort of trade-off. By accepting the inevitability of our stuttered dysfluencies, we can stop producing avoidance dysfluencies, and in so doing, overall our speech becomes less dysfluent than it otherwise would be and our ability to successfully get our messages across to the listener is increased. Of course, this is a compromise because we are still stuttering. In order to be able to make this compromise, we have to accept our stuttering and not try to hide it. In this respect we need to be pragmatic.

Having allowed a stutter to happen, and accepted that we simply can't say all the sounds we want to say, the pressing issue that then arises is "How can we best get the message across?" I don't believe there is just one right answer to this question, and it may be that different people find different ways that work for them. So, bearing this in mind, in the following section I shall describe my personal experience of what has worked for me.

Getting the message across - Personal experiences

I first made a firm commitment to stopping myself from producing avoidance dysfluencies back in 2000. Since then, I have experimented with a number of ways of getting my messages across to listeners when I find myself blocking on a sound or word. Of these, by far the easiest and generally most successful method – and the one that I now use as my default method – is to simply skip the sound or word I can't say and get on with saying the remainder of the words that I can say. I should stress here that I don't mean *avoiding* the sound or word I can't say. On the contrary, I always try to say the sound once. But then, if I find I can't say it more or less straight away, I abandon it and carry on with the rest of the sentence. To my mind, this is a highly pragmatic approach insofar as it ensures that I say what I can say with a minimum of delay because I don't waste time continuing to try to say the sounds I can't say. It does not involve any avoidance, yet it does involve acceptance. More often than not, I find that the listener is able to guess any sounds that I abandoned, from the context in which I have said them, and so he or she gets the message without me needing to go to

any extra lengths to convey it. So, jumping over the problem sounds in this way is always my first strategy. Sometimes it doesn't work and, despite continuing on to the end of what I want to say, I become aware that the listener has not been able to understand me. If this is clearly the case, I may go back and try to say the entire phrase again, or I might find a way of rephrasing it, or I might write it down, or I might simply accept defeat and give up. But whatever I do, I maintain two golden rules: *never use avoidance dysfluencies*, and *never use force*. By "never use force", I mean if I find myself blocking on a sound I never try to push through it. If a sound won't come out of its own accord, I simply skip it and continue on with the rest of the sounds and words that will come out. Furthermore, just as I take care not to stall before an anticipated stutter, I also take care not to speed up either, as this too is a form of avoidance dysfluency.

As mentioned, I first started employing this approach back in the year 2000. Before that, I had always stalled before anticipated blocks and then continued to try to say the sounds and words I was blocking on until I felt satisfied that I had said them well enough. This sometimes resulted in long delays, and these delays fuelled my fear of blocking. In the beginning, giving up on the sounds I was blocking on felt very strange, but when I did give up, I immediately found that doing so enabled me to continue on with the rest of what I wanted to say without any form of struggle. My fear of blocking diminished immediately, and the tendency to block also diminished substantially. This worked very well in most speaking situations, although I continued to experience difficulty in situations where it was essential to articulate specific sounds clearly in order for the listener to understand what I was trying to say. Overall, however, adopting this approach coincided with an immediate and sustained reduction in my tendency to block and in my fear of blocking. Over the years, since adopting it, this has generalized to the point where situations that I initially continued to experience some difficulty with are now no longer difficult for me.

Although many of the more blatant avoidance dysfluencies produced by people who stutter are easy for listeners to recognize, the more subtle ones can only be reliably recognized by the stutterers themselves. From the listener's perspective it is often impossible to distinguish them from normal dysfluencies. The implication of this is that clinicians can only help to a limited extent in the task of identification of avoidance dysfluencies. So, ultimately, success in this approach to therapy is only possible if clients themselves are able to distinguish between these two forms of dysfluency. My experience with clients so far suggests that this is not always an easy task. This is especially the case for the clients I have seen who, in addition to stuttering, frequently also experience sentence formulation difficulties or word-finding difficulties. It seems that, in those individuals, stuttering (and the anticipation of stuttering) is often itself triggered by those difficulties.

Summary

In this essay I have noted that not all of the dysfluencies produced by people who stutter are primary symptoms of stuttering. On the contrary, many are manifestations of our attempts to avoid stuttering. Although these "avoidance dysfluencies" may sometimes appear to help, in the long run they actually make stuttering worse, and people who stutter would be better off if they stopped producing them. The difficulty, when it comes to stopping them, is in being able to distinguish between avoidance dysfluencies — which are detrimental, and normal dysfluencies — which positively help us get our messages across. This essay provided a detailed explanation of how to go about differentiating these two types of dysfluency. Ultimately, only the speaker can know which sort of

dysfluency they are producing. Having learned how to recognize avoidance dysfluencies in one's own speech, the key to being able to stop producing them is to stop trying to avoid stuttering and to focus instead on minimizing the delay that stuttering causes to getting ones' message across. To make these changes, it is helpful to adopt the attitude that stuttering is essentially unavoidable and instead of continuing trying to say sounds and words that we can't say, simply to get on with saying the remaining words that we can say.

Further reading on the effects of dysfluencies on listeners.

- Arnold, J. E., Kam, C. L. H., & Tanenhaus, M. K. (2007). If you say *thee uh* you are describing something hard: The on-line attribution of dysfluency during reference comprehension. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 33*(5), 914-930.
- Brennan, S. E., & Schober, M. F. (2001). How listeners compensate for dysfluencies in spontaneous speech. *Journal of Memory and language*, 44(2), 274-296.
- Brennan, S. E., & Williams, M. (1995). The Feeling of Another's Knowing: Prosody and Filled Pauses as Cues to Listeners about the Metacognitive States of Speakers. *Journal of Memory and language*, *34*(3), 383-398.
- Christenfeld, N., & Creager, B. (1996). Anxiety, alcohol, aphasia, and *ums. Journal of personality and social psychology*, 70(3), 451.
- Collard, P., Corley, M., MacGregor, L. J., & Donaldson, D. I. (2008). Attention orienting effects of hesitations in speech: Evidence from ERPs. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 34*(3), 696-702.
- Corley, M., MacGregor, L. J., & Donaldson, D. I. (2007). It's the way that you, er, say it: Hesitations in speech affect language comprehension. *Cognition*, *105*(3), 658-668.
- Corley, M., & Stewart, O. W. (2008). Hesitation dysfluencies in spontaneous speech: The meaning of um. *Language and Linguistics Compass*, 2(4), 589-602.
- FoxTree, J. E. (2001). Listeners' uses of um and uh in speech comprehension. *Memory & cognition,* 29(2), 320-326.
- Kasl, S. V., & Mahl, G. F. (1965). Relationship of disturbances and hesitations in spontaneous speech to anxiety. *Journal of personality and social psychology, 1*(5), 425.
- Mahl, G. F. (1956). Disturbances and silences in the patient's speech in psychotherapy. *The Journal of Abnormal and Social Psychology*, *53*(1), 1-15.
- Schachter, S., Christenfeld, N., Ravina, B., & Bilous, F. (1991). Speech dysfluency and the structure of knowledge. *Journal of personality and social psychology*, 60(3), 362-367.
- Smith, V. L., & Clark, H. H. (1993). On the course of answering questions. *Journal of Memory and language*, 32(1), 25-38.
- Tiling, J. (2011). Listener perceptions of stuttering, prolonged speech, and verbal avoidance behaviors. *Journal of Communication Disorders*, *44*, 161-172.