

Margrethe's role in copenhagen



**ASSIGN
BUSTER**

Margrethe's character in Copenhagen mirrors the inherent complementarity and uncertainty in the play. Frayn uses Margrethe's character to catalyze events in the play, analyze the meeting between Bohr and Heisenberg as an ideological conflict, and voice the subtle emotions of the play to the audience. Frayn dispels preconceived notions about the pure scientific background of the meeting through Margrethe's steady deflation of the esoteric stereotypes of male scientists. Margrethe plays the role of a translator by translating Bohr and Heisenberg's scientific jargon into associable and humanistic dialogue for the audience. Margrethe engages the principles of uncertainty and complementarity by voicing Bohr and Heisenberg's covert emotions which allowed them to sift through both moral and personal ramifications. She embodies uncertainty by fulfilling the stereotypical role of a housewife without scandalizing the audience while also being vocal about her scientific ideas. She embodies complementarity by using these two sides to her personality as complements to steadily nudge the audience away from a formula of a scientist.

Frayn uses Margrethe to reduce quantum mechanics to the study of elements characterized by a personal drive and ideology. Margrethe mirrors the emotional connection that Bohr and Heisenberg share and nudges the audience come to terms with their meeting as an emotional and ideological conflict within the realm of quantum mechanics. Both Bohr and Heisenberg on several occasions note Margrethe's ability to move beyond their science and bring it to a more "personal" level (Frayn 73). Margrethe, while talking about complementarity, quickly metamorphoses the conversation into an attack on Heisenberg's personal choices in advancing his career. Bohr tries

to interject this sudden turn in the conversation. " Not to criticize, Margrethe, but you have a tendency to make everything personal" (73). Bohr's defensive reaction in response to Margrethe's attack can be perceived as Bohr's display of his emotions towards Heisenberg. Even though pitted against each other in the prevailing circumstances, the protégé doesn't hesitate to protect his student/son.

On the surface what seems like a logical response to maintain the scientific integrity of the situation can actually be perceived as an exposition of a hidden emotional connection that is pervasive in their relationship irrespective of the circumstances. Margrethe is the key factor who catalyzes this display of Bohr's emotions and hidden humanism. She exposes his humanitarian side which leaves the audience uncertain about his character. She exposes how Bohr's two aspects of his personality complement each other and resolve his actions. As a response to this interjection, Margrethe lashes out on Heisenberg and Bohr stating, " I'm sorry but you want to make everything seem heroically abstract and logical...It's confusion and rage and jealousy and tears..." (73). Margrethe's sudden outburst, however, does not detract from the flow of the play. It instead reveals her emotions and unleashes a wave of sentiment for Bohr, who, roused by her argument follows suit in the attack against Heisenberg. In her statement, she uses multiple nouns to describe the reality of their situation. She rambles on and her tone lends uncertainty and doubt to her statement. Her argument brings out the inherent uncertainty in their realities where there no affixed emotion to feel or a perspective to justify. She brings out the subjectivity that represents their situation and allows the audience to move away from their

stringent notions of reality. Margrethe's role as a wife allows the audience to see that Bohr is not a solitary individual and also further credits Margrethe with the ability to evaluate Bohr's emotions for the audience.

In the first few lines of the play, Bohr calls Margrethe "his love" which helps to establish his romantic association with Margrethe while also showing his compassionate side (3). This initial connection allows the audience to see that Bohr, although a physicist, does have a bond outside his world of science, and that his emotions are just as accessible as any other human. This bond is what allows Margrethe to evaluate her husband's emotions. The audience is presented with Margrethe's ability to understand and mirror Bohr's emotions in the same conversation when she states, "I know when you are angry" which not only helps show the audience that they have a normal, loving marriage, but also allowing the audience to have a glimpse at Margrethe's role within the play (4). This is in opposition to the audiences' stereotype of Bohr, where there is an expected emotional and marital disconnect from his romantic partner. Without Margrethe playing the role of wife, the audience would have had a harder time eliminating their initial assumptions about Bohr, making it harder for the audience to connect with the play's greater purpose.

Margrethe doesn't explicitly dominate every discussion but underscores her presence by exposing the emotional and humanitarian side which then slowly nudges her into the dominant position. Margrethe breaks down the ongoing conversation into layman terms, which is approved by Bohr and Heisenberg. By having Margrethe's translations legitimized by Heisenberg and Bohr's approval, Frayn carefully constructs a situation where Margrethe

embodies the duality of a housewife and of a woman cognizant of the ongoing esoteric conversation. This ensures the steady deflation of stereotypes instead of a rushed revelation that would result in confusion. She translates the famous uncertainty principle by Heisenberg into laymen terms to effectively drive its meaning to the audience. She expresses it in simple language by saying, "If you're doing something you have to concentrate on you can't also be thinking about doing it, and if you are thinking about doing it, then you can't actually be doing it. Yes" (72)? This simple explanation transcends the realm of science and helps the audience apply this complex principle to their lives. Through this universal explanation, Margrethe drives ubiquitous application of uncertainty in everyday life and emotions.

Margrethe uses her scientific knowledge to gain connectivity with the audience while proving her efficacy in her ability to participate in a scientific debate. She flips in and out between her dual roles, that of a housewife and of an intelligent woman. The audience is exposed to only one of these roles but never both at once hinting at the inherent uncertainty in her character. This uncertainty in her character manifests itself in the eyes of the audience as they can only know one side of her being at a given point in time.

Through her meticulous knowledge of scientific jargon that is profusely used by Bohr and Heisenberg and her vocal interjections in their conversation, she acquaints the audience to the forthcoming deflation of preconceived notions. She plants the seeds of uncertainty in the minds of the audience and readies them to the upcoming conflict in terms of Bohr and Heisenberg's characters, ideologies and scientific drive. Frayn implicitly points to the presence of uncertainty, in terms of her character, and complementarity, in terms of her

being an integrating center to the conversations. Dependency and reliability on personal associates are the implicit tools used to deflate notions of solidarity and isolation that cloud a scientist's reputation. This is displayed through Bohr's dependence on his own wife to help put his work into words. Not only does Frayn note it in his postscript, but Margrethe mentions it several times throughout the play. For example, when the men are discussing a debate between Bohr and another scientist in the field, Margrethe interjects several times to point out that she typed out Bohr's responses each time: Heisenberg: You've drafted your reply. Margrethe: I've typed it out. Heisenberg: You've checked it out with Klein. Margrethe: I've retyped it (27). To the audience, Bohr is no longer a solitary and secretive scientist. He is a human who depends on the people around him to help advance his work.

Margrethe's role is intellectually furthered by showing the audience how she gained her knowledge of science through her work with Bohr. Frayn's inclusion of these relationships shows his acknowledgment of how important these social connections are in breaking down stereotypes and how these emotional connections are established. The play relies heavily on its audience's ability and willingness in trying to move the audience past Heisenberg's cultural identity. Margrethe is incredibly important in the opening sequence by helping interpret Heisenberg's nervous emotions about having to confront his teacher, and more importantly, his father. She serves as the mediator between this duo and brings to light emotions and issues beyond the realm of science. As the cordial greetings are exchanged, Margrethe is quietly observing. At one point she states, " I discreetly watch

him from behind my expression of polite interest as he struggles on" (14). She is cognizant of the emotional struggle that is bubbling within Heisenberg and the uncertainty associated with his ideological scientific drive. Margrethe notes, " So now of course I'm starting to feel almost sorry for him. Sitting here all on his own in the midst of people who hate him, all his own against the two of us" (Frayn 16). She voices his hidden emotions and humanizes the conversation. There is uncertainty in terms of how to converse with one another given the situation but complementarity also plays when this uncertainty exposes the dual complementary personality of the scientist.

Although Heisenberg is the enemy, the breakdown of boundaries among the characters in the play from Margrethe's perspective allows the audience to see Heisenberg as human, not as the enemy. Heisenberg's characterization as the enemy is more complicated than him wanting the Nazis to have the atomic bomb. Heisenberg, with the help of Margrethe's perspective, is characterized as a human looking to protect his family and the people he cares for, including Bohr. Frayn challenges the audience to excuse their predispositions and look at Heisenberg from a different perspective, yet much of this is facilitated with the help of Margrethe's prompting and urging. " Margrethe: No, I've kept my thoughts to myself for all these years. But it's maddening to have this clever son forever dancing about in front of our eyes, forever demanding our approval, forever struggling to shock us, forever begging to be told what the limits to his freedom are, if only so that he can go out and transgress them!" (78) This outburst allows the audience to realize that despite the unfortunate circumstances, the Bohr's viewed Heisenberg as a son. This statement resembles a parent reprimanding his or

her wayward child. Heisenberg was the wayward son to the Bohr's implying a personal connection that pervades the uncertain circumstances. Margrethe speaks about the young physicist as of a lost child when she refers to Heisenberg as one of the "two new sons" (57). Margrethe allows the audience to accept Heisenberg as a fellow human being and move past the hostility associated with the then Nazi Germany. Instead of letting the audience perceive Heisenberg as a stereotypical Nazi scientist looking out to build the atomic bomb for Hitler, Margrethe uses her emotional connections to decompose the immense hatred towards his character and replace it with restrained sympathy. Frayn uses her as a humanizing element who, through her conversation with Heisenberg brings to the table hidden emotions and conflicts that truly characterize the situation.

By the end, this emotional bridge that Margrethe develops leaves the audience with a moral struggle. While an audience may come looking for answers as to what occurred at the meeting, or expecting a play wrought with scientific language, what they leave with is uncertainty about the meeting and the people involved. The focus of Copenhagen is less on math and science and more on relationships and emotional struggles every character has to go through. The audience questions how applicable their original perceptions of the housewife, the physicist and the "Nazi" really are. Instead, it becomes a debate of human quandary, emotions and relationships. This uncertainty is necessary in understanding the intentions of the characters and comprehending the manner in which it pairs up with complementarity of Margrethe's character in bringing to the table the ideological and emotional struggles of the characters. As Margrethe keeps

insisting, everything under discussion, from politics to the loftiest of scientific abstractions, is finally also “ personal”. Frayn’s ability to make everything “ personal” to the audience is what makes Copenhagen a Tony award winning play and Margrethe the nucleus of this play.