

## Mentor and Disciples. Partners of the Heart

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### Summary

The plot of *Something the Lord Made* incites comment on the human qualities that should form part of the mentor-disciple relationship, fundamentally on the part of the mentor. Its viewing is useful for students and professionals in the health area.

*Keywords:* Surgery, Teaching, Humanism, Sociology.

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### Technical Details

**Title:** *Something the Lord Made*

**Country:** USA

**Year:** 2004

**Director:** Joseph Sargent

**Music:** Christopher Young

**Screenwriter:** Peter Silverman and Robert Caswell. Based in part on the article *Like Something The Lord Made* by Katie McCabe (*Washingtonian*, 1989).

**Cast:** Alan Rickman, Mos Def, Mary Stuart Masterson, Kyra Sedgwick, Merritt Wever and Doug Olear.

**Color:** Color

**Runtime:** 105 minutes

**Genre:** Drama

**Production Companies:** Home Box Office (HBO) and Nina Saxon Film Design

**Synopsis:** Alfred Blalock and his colleague Vivien Thomas formed an unprecedented team in Baltimore in the 1940s. Together they developed an effective technique for correcting the hearts of "blue babies". At the same time that they were discovering a new scientific field, social pressure threatened to undermine their fruitful collaboration.

**Awards:** Three Emmy awards (Best Made for Television Movie, Best Cinematography and Best Single-Camera Picture Editing).

### Introduction

Nowadays when human values seem to be in crisis, I was very moved to see the film I comment on below.

The television film, *Something the Lord Made*, which inspired the present article, is based on the real lives of the surgeon Alfred Blalock (Alan Rickman) and the laboratory technician of African-American origin, Vivien Thomas (Mos Def). The screenplay, which by the way reflects the facts quite well, narrates the steps taken by these pioneers of heart surgery from Thomas's point of view. His name was not put to the procedure he helped to create, which is now known world-wide as the Blalock-Taussig operation. Thomas had begun to assist Blalock in 1930, when he was 19 years old, after the Depression put an end to his dream to study medicine. He soon went from cleaning the laboratory to making Blalock's theories a reality by participating in numerous experiments and making the surgical instruments necessary for carrying them out.

What began as a relationship between master and servant turned into one between mentor and disciple, to end with the two functioning as a single person. They came to be good friends, but occupied very different places in society.

This film opens up for debate aspects of many types: medical-surgical, academic, ethical, socio-

logical, human, etc., some of which have been discussed in this journal<sup>1</sup>; here we shall focus mainly on those relating mentor to disciple.

### Main characters. Biographical aspects

#### 1. The Mentor: Alfred Blalock (5 April, 1899-September 1964) (Figure 1)



Figure 1: Alfred Blalock

Blalock was of American origin, a professor, researcher and Chief of Surgery<sup>2</sup>. He is famous for the Blalock-Taussig operation, used in the surgical treatment of the tetralogy of Fallot, commonly known as blue baby syndrome<sup>3</sup>.

Blalock graduated from Johns Hopkins Medical School (1922), where he met Professor William S. Halsted. In 1925, he moved to Vanderbilt University where he was named head of the laboratory for surgical research. There he met the other protagonist of the story, Vivian Thomas, who at first was employed to clean the laboratory and later as an assistant in experimental research. It was there and working on treatment for shock that Alfred Blalock and Vivian Thomas began to interact, and that interaction is the basis of this article.

When Blalock was offered the position of Chief of Surgery at Johns Hopkins Hospital (1941), he accepted on the condition that his assistant, Thomas, would come with him. At Hopkins they maintained an up and down relationship for more than three decades. Together they developed a technique for bypassing aortic coarctation, and while



Figure 2: Helen Taussig

working on this the paediatrician Helen Taussig (Figure 2) brought the problem of blue baby syndrome to their attention.

Blalock theoretically designed the operation, but it was Thomas who perfected the surgical technique in the laboratory and guided Blalock during the procedure. The first Blalock-Taussig operation was successfully carried out on 29 November, 1944 on Eileen Saxon, thus initiating paediatric heart surgery. As a result, the institution (Johns Hopkins) gained greater international renown and Blalock and his team (which did not include Thomas) received numerous awards<sup>4</sup>.

#### 2. The Disciple: Vivien Theodore Thomas (29 August, 1910 - 26 November, 1985) (Figure 3)



Figure 3: Vivien T. Thomas

Of African-American origin, he was the assistant surgical technician to Prof. Blalock, first at Vanderbilt University in Nashville, Tennessee and later at Johns Hopkins in Baltimore, Maryland<sup>5</sup>.

Born into humble origins (his father was a carpenter), with no university training, and struggling in a hostile environment of poverty and racism, Thomas managed to become a pioneer in cardiac surgery, helping to develop the procedure for treating blue baby syndrome in the 1940s. Although he had hoped to study medicine (he only had secondary school qualifications) the great depression obliged him to put aside his dream and go to work.

Thomas showed an extraordinary aptitude for experimental work and uncommon surgical and inventive skills (Figure 4). Blalock was aware of this and gave him freedom to work on the projects, so that he would have more time for his own clinical and teaching activities. Within this atmosphere, mutual admiration and respect developed, and they forged an intimate professional relationship. Outside the laboratory, however, he maintained the social distance dictated by the times (racism and segregation being the norm). We can point out two details in this respect: 1) although Thomas did the work of a post-doctoral researcher, he was paid as an unskilled worker; and 2) when he looked into the possibility of becoming a doctor, the inflexibility of the university of the time made it impossible for him.



Figure 4: Instruments designed by Vivien T. Thomas

Thomas trained many surgery residents, some of whom subsequently became famous, such as Denton A. Cooley and William P. Longmire Jr., both of whom appear in the film and assisted Blalock in that historic first operation (Figures 5 and 6). As time went by, Thomas's technical skills became legendary. When he was in a position to negotiate with Blalock (1946), he managed to become the best paid technician at Johns Hopkins and thanks to that was able to give up moonlighting, since in his free time he worked as a waiter.

Fifteen years after the death of Blalock, Thomas continued working at Hopkins as director of



Figure 5: Denton A. Cooley



Figure 6: William P. Longmire Jr

the surgery research laboratories. During those years he mentored a good number of African-American laboratory technicians, as well as Hopkins Black cardiac resident, Dr. Levi Watkins (Figure 7). Thirty years had to pass since Thomas and Blalock's first operation for Johns Hopkins Hospital to receive its first African-American student.

During those years he had trained so many surgeons who later became heads of departments all over the United States, that in 1968 his portrait was hung in the halls of Johns Hopkins, next to the portrait of Blalock that was painted years before (Figure 8). In 1976, Hopkins gave him an honorary doctorate,



Figure 7: Levi Watkins

although due to certain restrictions it was in Laws instead of the one he deserved in Medicine.

When he retired (1979), he wrote an autobiography titled *Pioneering Research in Surgical Shock and Cardiovascular Surgery: Vivien Thomas and His Work with Alfred Blalock*, which was later changed to *Partners of the Heart: Vivien Thomas and His Work with Alfred Blalock* (Figure 9). He died a few days before the publication of this book, where he mentioned his boss, teacher and friend, Blalock.

Nevertheless, and as Thomas said<sup>6</sup> his relationship with Blalock did not always go so well; a white surgeon's approach to his race was complicated and contradictory. On the one hand, Blalock always



Figure 8: Portraits of Alfred Blalock and Vivien T. Thomas (Johns Hopkins University)

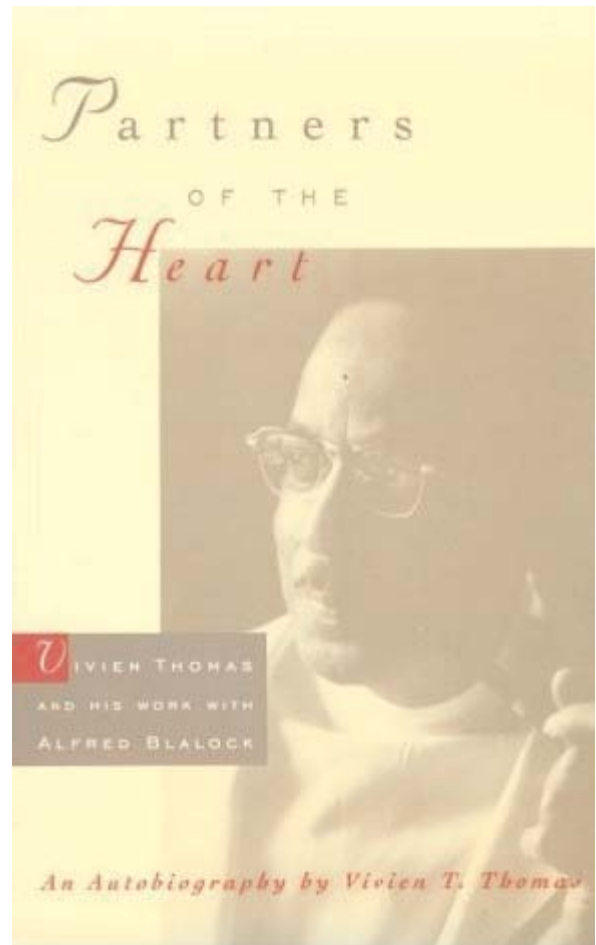


Figure 9: Autobiography of Vivien T. Thomas

defended Thomas's capabilities, and loudly insisted that Thomas should accompany him in the operating theatre, over the objections of his Hopkins colleagues. But on the other hand, there were limits to his tolerance particularly regarding remuneration, academic recognition and social interaction outside of work. At the end of the film, Blalock himself recognizes these shortcomings, although I do not know if this happened in real life.

### Relationship of the mentor towards his disciples

Four dimensions are traditionally attributed to surgery (scientific, technical, artistic and human), dimensions which must be learned and transmitted. Together with this, teaching demands professional and pedagogical competence, as well as the relevant human qualities. It seems that the human profile of a surgeon is very important for carrying out work that includes clinical work, teaching, research, and quality management<sup>7</sup>.

Professors become mentors when, besides demonstrating their intellectual capacity, training and

knowledge, they are able to orientate their daily business with scientific curiosity, professional ethics, a style and virtues that merit admiration and affection from their disciples, who, attracted by this, constitute a school.

The move from student to disciple is simpler. It usually occurs during the teaching-learning of the specialization. In this phase of training, the professor (chief) and disciple (resident) are inseparable; there are no problems of overcrowding, and no more distance than that of scientific, ethical and moral respect. The authority of the professor is the fruit of his knowledge, honourableness and personal influence over the student.

A good mentor must transmit attitudes rather than knowledge. Eugenio D'Ors used to say that *you can learn from a mentor things that a book will never teach you* (cited by 8). It is not a matter of direct, individualized action of the mentor with each disciple; rather, it is a group climate that the mentor creates around him or herself. That is why a great mentor attracts the best students and a selective atmosphere of the "elite" is created, a word that is no longer in vogue.

Recognition and gratitude towards the mentor can be gathered from all of this. As Pedro Lain Entralgo<sup>9</sup> says in the prologue to *Tres españoles: Cajal, Unamuno y Marañón: this has always been a sign of wisdom and intellectual honesty*. Everything good that we learn from the mentor should then be passed on to those who follow us.

We must be aware that the vast majority of knowledge that we possess has been taught to us by other people. In the case of surgeons, there are those who have taught us different surgical techniques; this category could be called "trainer". We have also encountered persons who have transmitted knowledge to us and taught us the theoretical foundation (the why and when) of these techniques; these would be the professors. What is truly important in life is to find a trainer-professor-mentor.

That is why mentors go far beyond these other categories; they transmit a style of how to confront life and our profession, contributing personality and influence to all the aspects that depend on them. Mentors, besides teaching, seek and channel the vocations of their disciples. They direct and mark the professional and scientific careers of their disciples. Out of the mentor-disciples symbiosis, the school is born under the auspices of the mentor; he or she maintains a unity with its own characteristics

in the clinical, teaching and research aspects.

The mentors' responsibility makes them maintain exemplary conduct in both their public and private life. Their competences thus go beyond the borders of their discipline, undertaking other types of knowledge in accordance with the scientific and cultural milieu of the time. This is transmitted and the disciple grasps it. Not for nothing did José Ortega y Gasset state in his essay *Misión de la Universidad* (1930): *the man who does not measure up to his times lives below what his authentic life would be*<sup>10</sup>.

Their breadth of spirit will become manifest in a generosity without distinction, both spiritually and materially. The great vascular surgeon Rene Leriche once said: *the mentor must understand the aspirations and needs of those starting out in life* (cited by 8). That is why the professional promotion of mentors' disciples, based on scientific and ethical criteria<sup>11</sup>, is an important chapter in the mentor-disciple relationship. I feel that one of the most rewarding things in mentors' lives is to observe with enthusiasm and honesty how their disciples surpass them.

It is a principle of education that teaching must be non-violent and respect the free personality of the disciple. Affection, persuasion and exemplarity should be the only means mentors employ with their students. We should not forget that people possess awareness and dignity; violence only leads to insubordination, or what is worse, hypocrisy. Mentors who truly wish to bear such a title must treat their students with fairness, tolerance, naturalness, affection and camaraderie, because there is nothing that damages a student more than coming upon the lack of understanding, pride and pomposity of a professor. All of this can be achieved by teaching with modesty, humility, affection and friendliness, in short, by offering friendship to the disciple. In this way, work will not be considered a burden, but rather a pastime in which everybody teaches and learns.

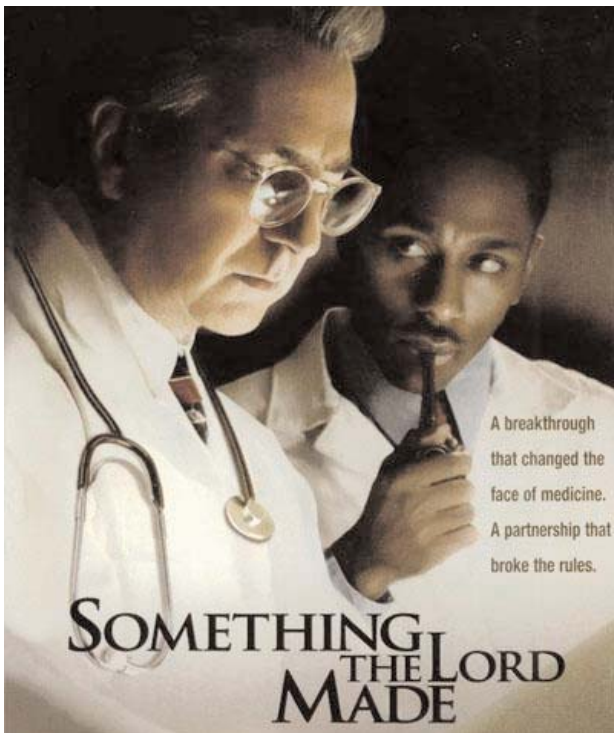
Finally, it is important for mentors to recognize and correct their errors even if they are shown up by their students. In this sense Socrates had this to say: *I am one of those who likes to be corrected when I am wrong and to correct others when they stray from the truth; both correcting and being corrected are pleasing to me, since it is more advantageous to find oneself freed the greatest of evils than to liberate another from it* (cited by 8). The disciple also has many responsibilities towards his or her mentor (Table 1), but that is another story.

Table 1. Mentor and Disciple Relationship

MENTOR		DISCIPLE	
Traditional view	Current view	Traditional view	Current view
Paternalistic	Sponsor	Servile/obedient	Equally responsible
Boss/authority	Friend/colleague	Favourite son	Disciple
Rigid/strict	Responsible	Member of a group	Independent individual
Protector	Liberator	Formed by the mentor	Helps to make him or herself
Leads the disciple	Develops potential	One type of thought	One's own thought
		Responds to orders	Responds to motivation

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Wallpaper with the two protagonists of the film