

Unerkannte Paradigmenwechsel

Aktuelle Forschungspraxis erdacht vor 2000, 300 und
50 Jahren.

HBSP & SGGP, Bern, 12. Nov. 2022

Gerd Folkers, Zürich

2509
T. LVCRETIÆ PICVREI POTE
CLARISS. LIBER PRIMVS

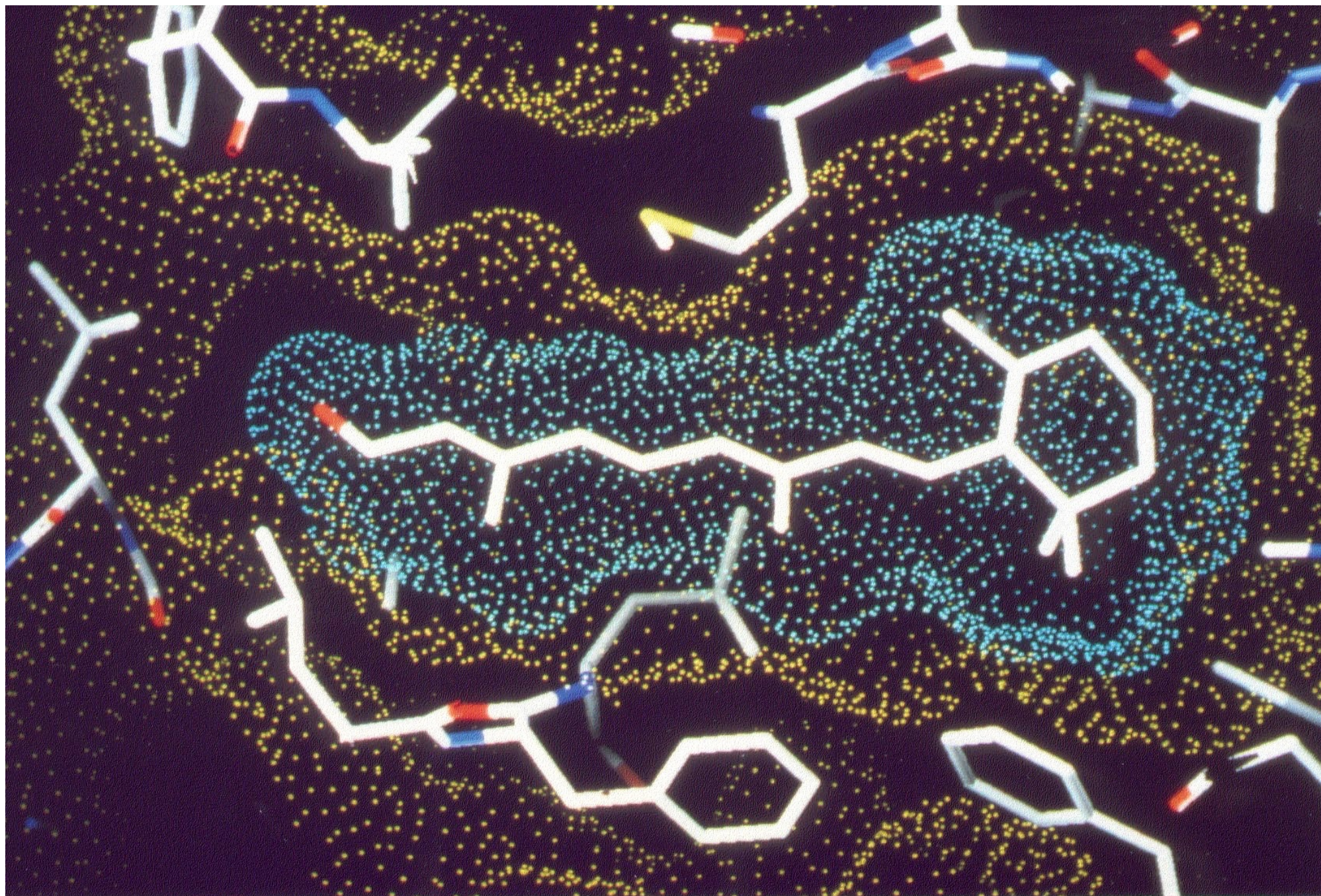
EN EA
DVM
GENI
TRIX
HOMI
NVM
DIVVM
QVE
VOLVT
TAS

Alma uenus cali subter labetia signa
Qua mare nauigium q̄tras frugiferetis
Concelebras per te q̄m q̄mis om̄e animatū
Concipitur: uisit q̄, ortū lumina solis
Te dea te fugiunt uerti: te nubila cali
Aduentum q̄ tuum: ē suauis dedala tellus
Submittit flores: ē rident aquora ponti
Placatum q̄ nitet diffuso lumine celū
Nam simul ac spēs patefacta ē uerna dies
Exserata uiget genitalis aura fauoni:
Aerea primum uolucres te diua tuū q̄
Significant mutum p̄culsa cōda tua ui
Inde fert pecudes per sultat pabula lata

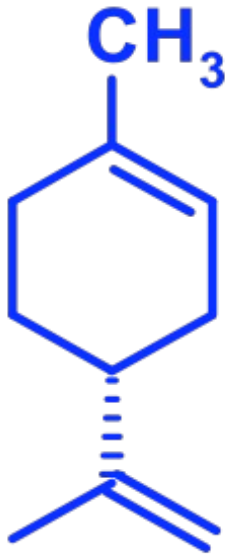
Schlüssel und Schloss

"Um ein Bild zu gebrauchen, will ich sagen, dass Enzym und Glucosid wie Schloss und Schlüssel zueinander passen müssen, um eine chemische Wirkung aufeinander ausüben zu können."

Emil Fischer 1894



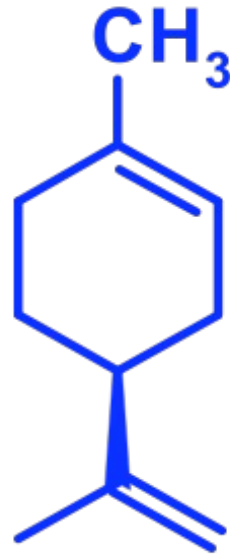
VITAMIN A



**(R)-(+)-
Limonen**

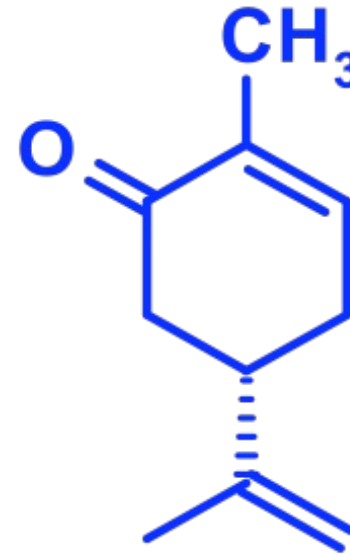
Geruch:

Orange



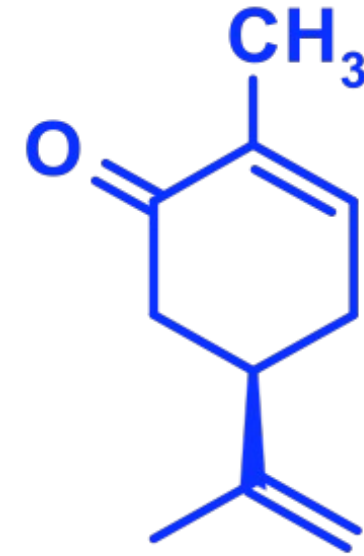
(S)-(-)-

Zitrone



**(S)-(+)-
Carvon**

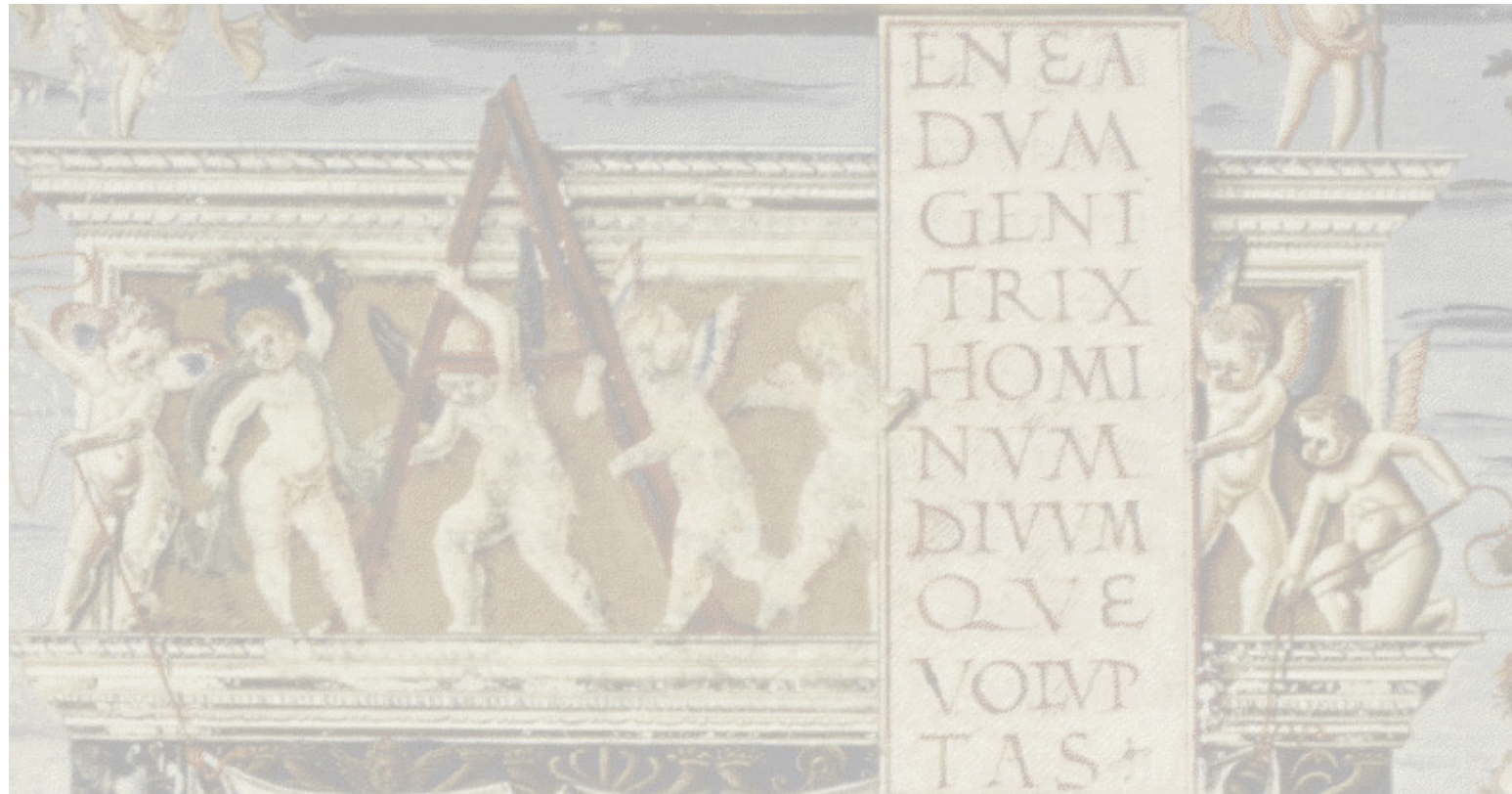
Kümmel



(R)-(-)-

Pfefferminze

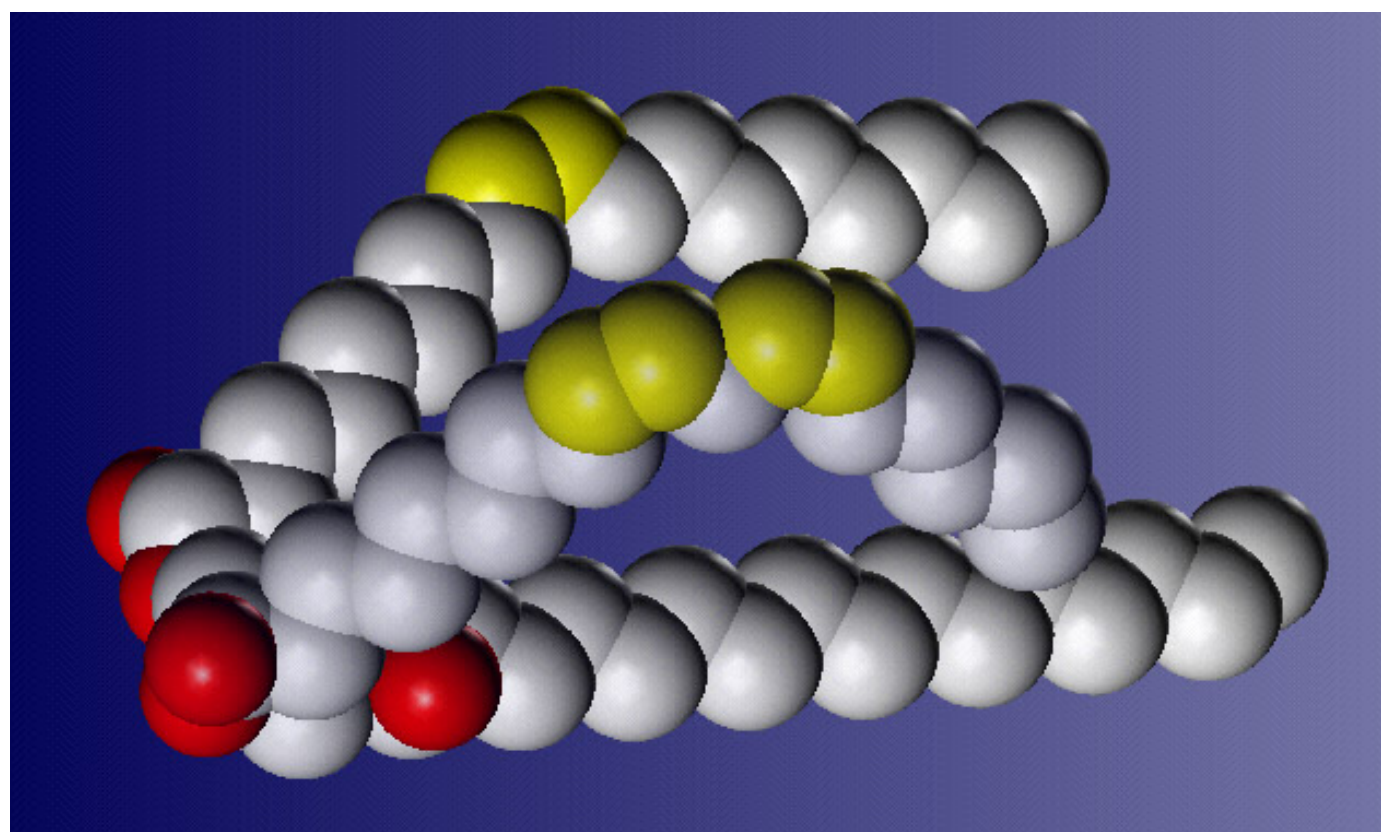
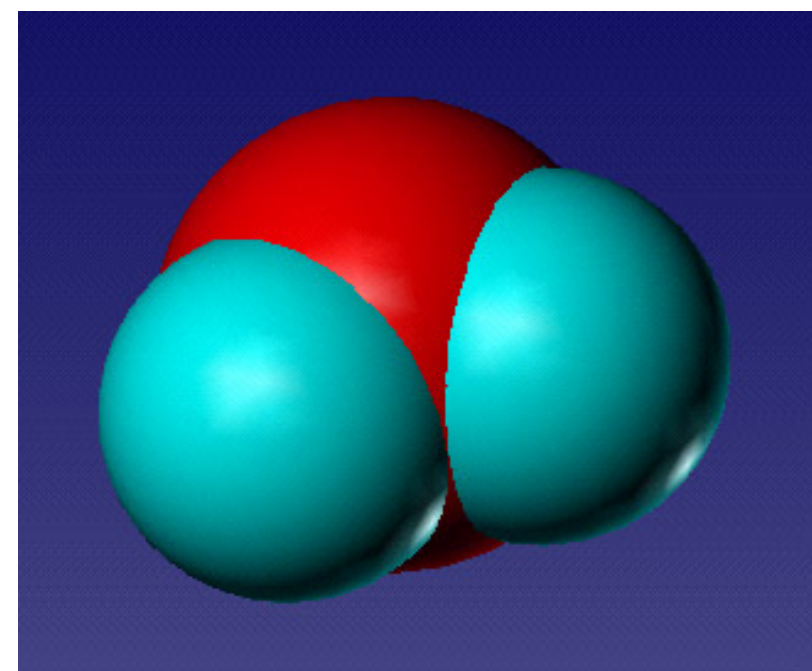
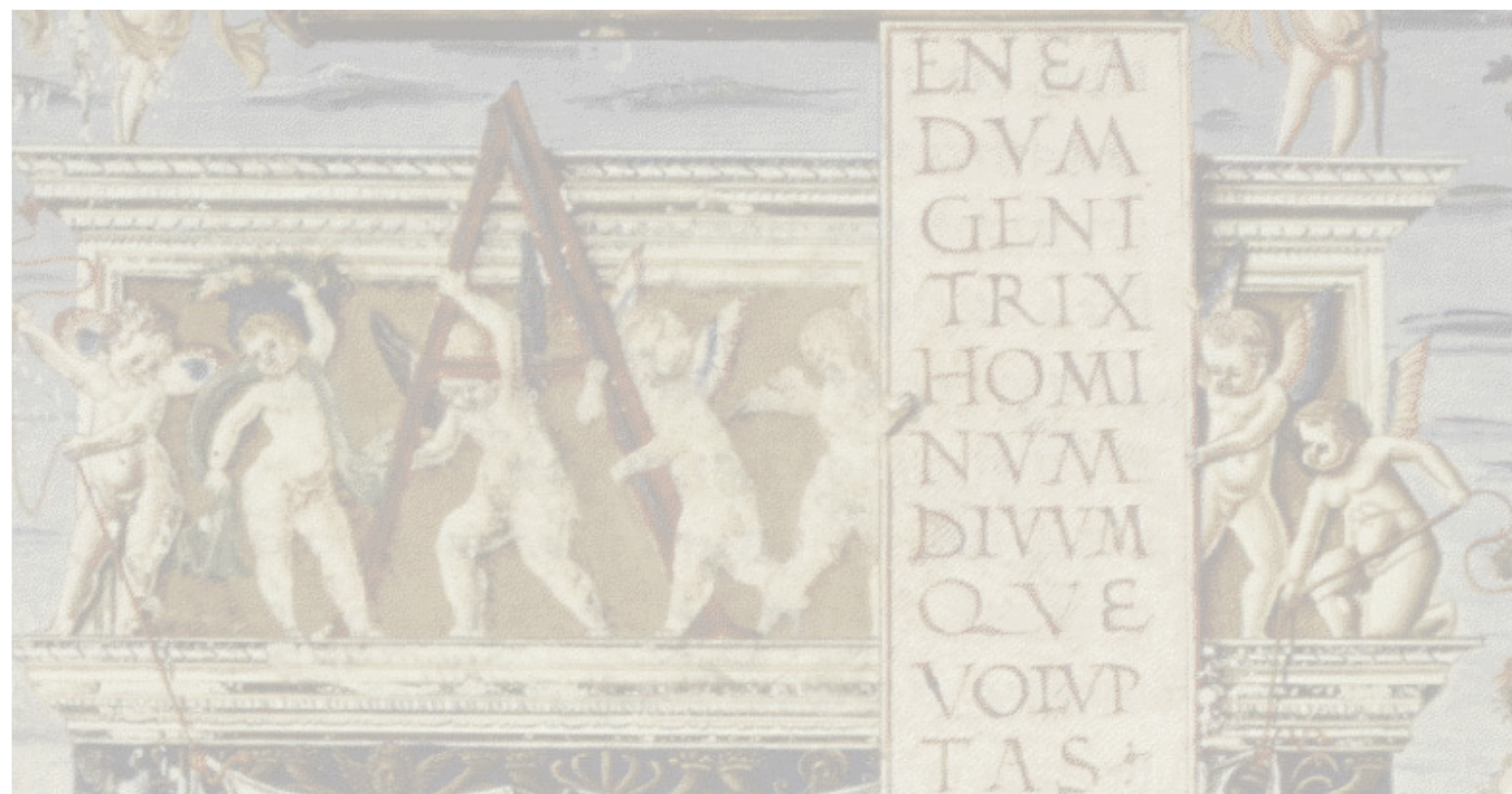




„...oder warum fliesst wunderbar rasch durch die Seihe der Wein ab, aber das Baumöl tropft nur zaudernd hinab in die Kufe?“

„Offenbar bildet sich Öl aus grösseren Urelementen oder sie sind auch verhäkelt und mehr miteinander verflochten...“

De rerum natura, Titus Lukretius Carus, 60 v.Chr.





TRAVELS

INTO SEVERAL

Remote Nations

OF THE

WORLD.

IN FOUR PARTS.

By *LEMUEL GULLIVER*,
first a *SURGEON*, and then a *CAPTAIN*
of several *SHIPS*.

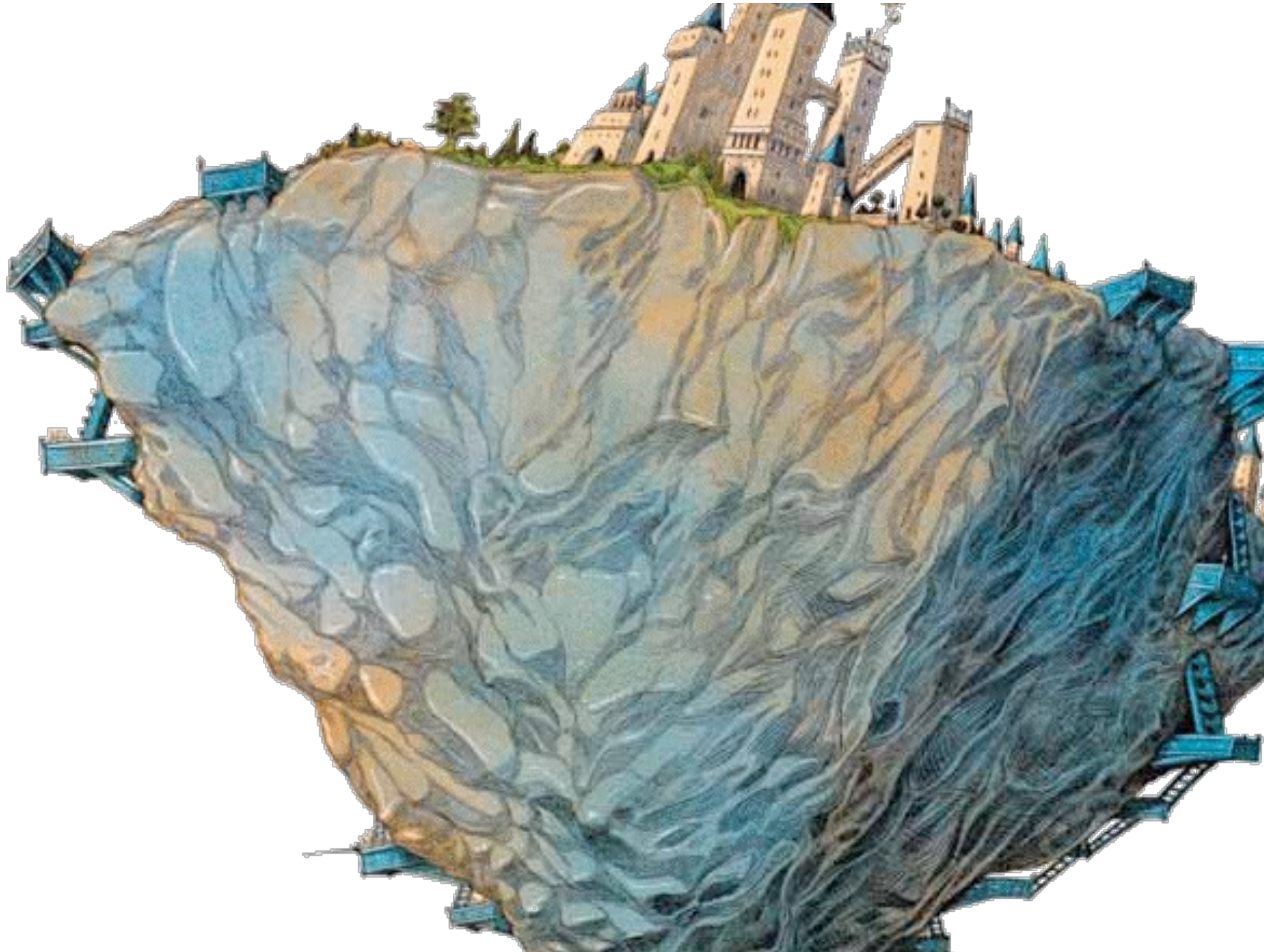
VOL. I.

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M, DCC, XXVI.

*Compositum, juxta, fuisseque animi, sanctosque recessus
Mentis, et incoctum generoso pectus honesto.*

Reise nach Laputa, Balnibarbi, Luggnagg, Glubbdubdrib und

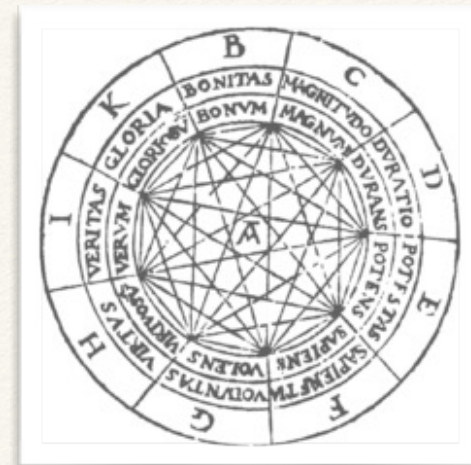


Vorsicht: Satire!

The Academy of Projectors at Lagado

"... Every one knew how laborious the usual method is of attaining to arts and sciences; whereas, by his contrivance, the most ignorant person, at a reasonable charge, and with a little bodily labour, might write books in philosophy, poetry, politics, laws, mathematics, and theology, without the least assistance from genius or study." He then led me to the frame, about the sides, whereof all his pupils stood in ranks. It was twenty feet square, placed in the middle of the room. The superficies was composed of several bits of wood, about the bigness of a die, but some larger than others. They were all linked together by slender wires. These bits of wood were covered, on every square, with paper pasted on them; and on these papers were written all the words of their language, in their several moods, tenses, and declensions; but without any order. The professor then desired me "to observe; for he was going to set his engine at work." The pupils, at his command, took each of them hold of an iron handle, whereof there were forty fixed round the edges of the frame; and giving them a sudden turn, the whole disposition of the words was entirely changed. He then commanded six-and-thirty of the lads, to read the several lines softly, as they appeared upon the frame; and where they found three or four words together that might make part of a sentence, they dictated to the four remaining boys, who were scribes. This work was repeated three or four times, and at every turn, the engine was so contrived, that the words shifted into new places, as the square bits of wood moved upside down."



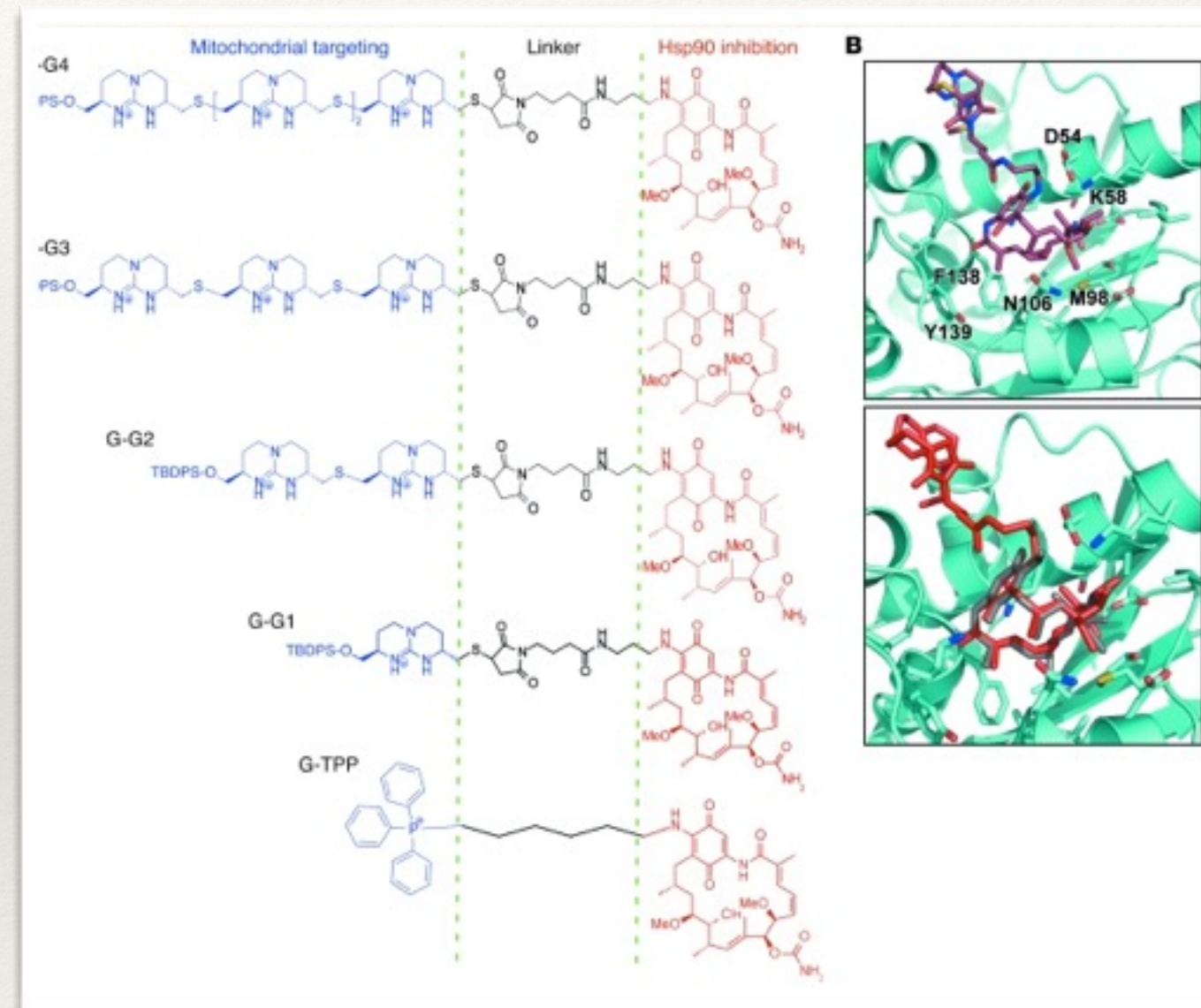


Vorsicht: Realität!

J Clin Invest. 2009 Mar 2; 119(3): 454–464.

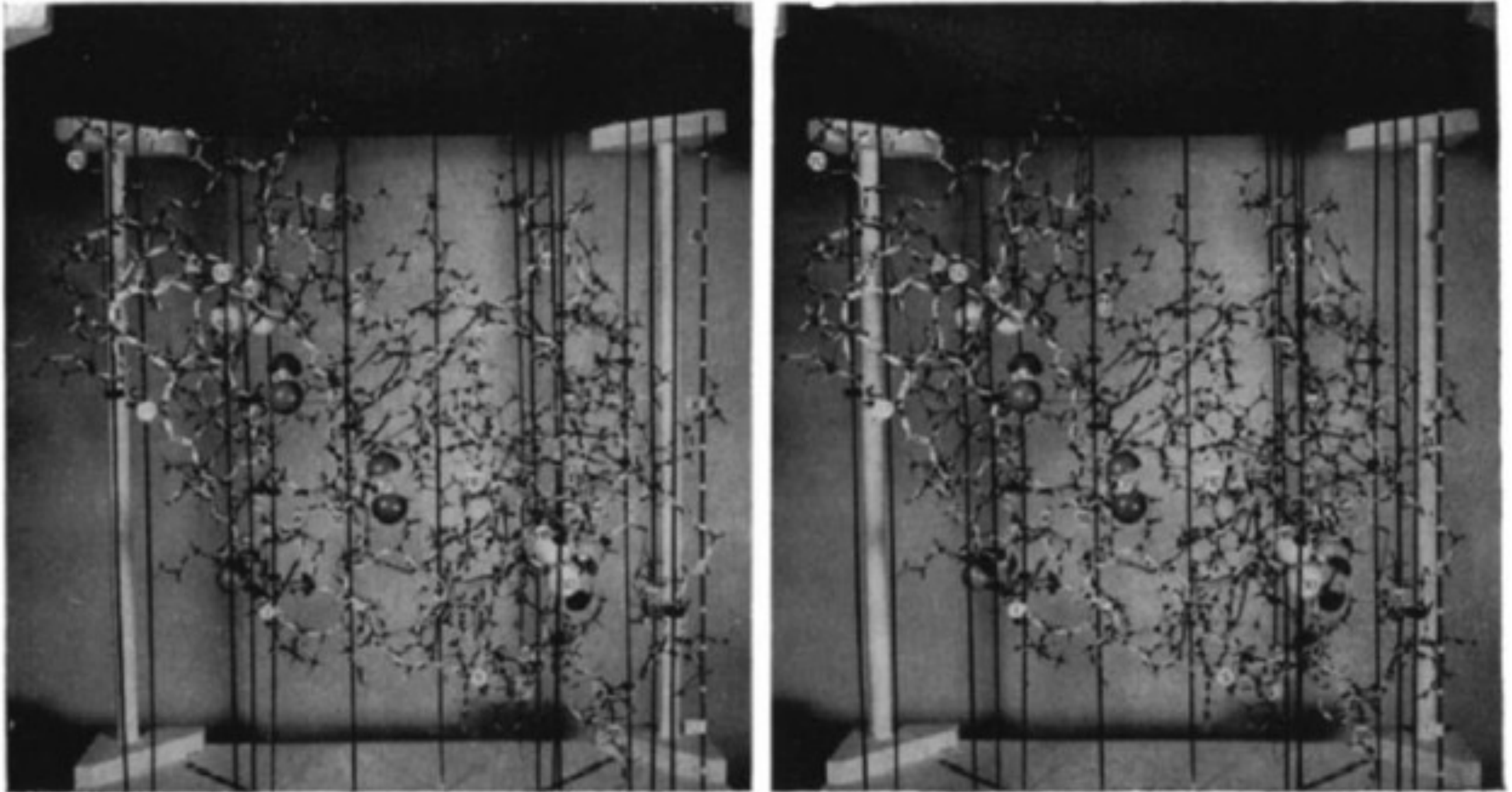
Structure of Gamitrinibs.

(A) Combinatorial modular design. The indicated individual modules of Gamitrinibs (mitochondrial targeting, linker, and Hsp90 inhibition) are indicated. G-G1, Gamitrinib-G1; G-TPP, Gamitrinib-TPP-OH; TBDPS, tert-butyldiphenylsilyl. (B) A 3D docking model of Gamitrinib-G1 with Hsp90 N-domain (top panel). The side chains of contact sites are labeled and in color. An overlay of Gamitrinib-G1 (red) and GA (gray) in the ATPase pocket of Hsp90 (bottom panel).



DICKERSON AND GEIS
THE STRUCTURE AND ACTION OF
PROTEINS





Stereo photographs of an atomic model of the hen egg-white lysozyme molecule. Figure reproduced from [North and Phillips \(1969\)](#).

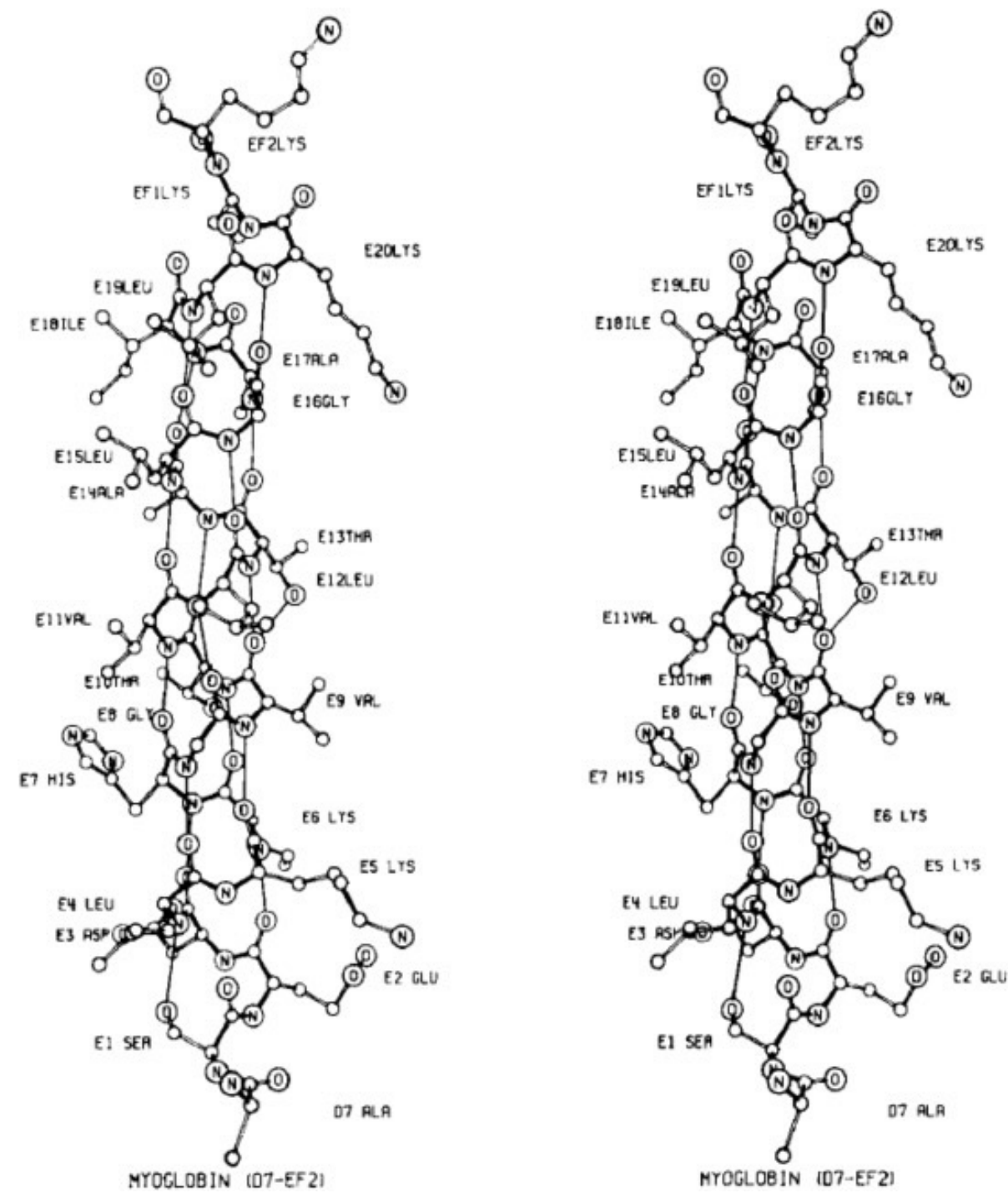
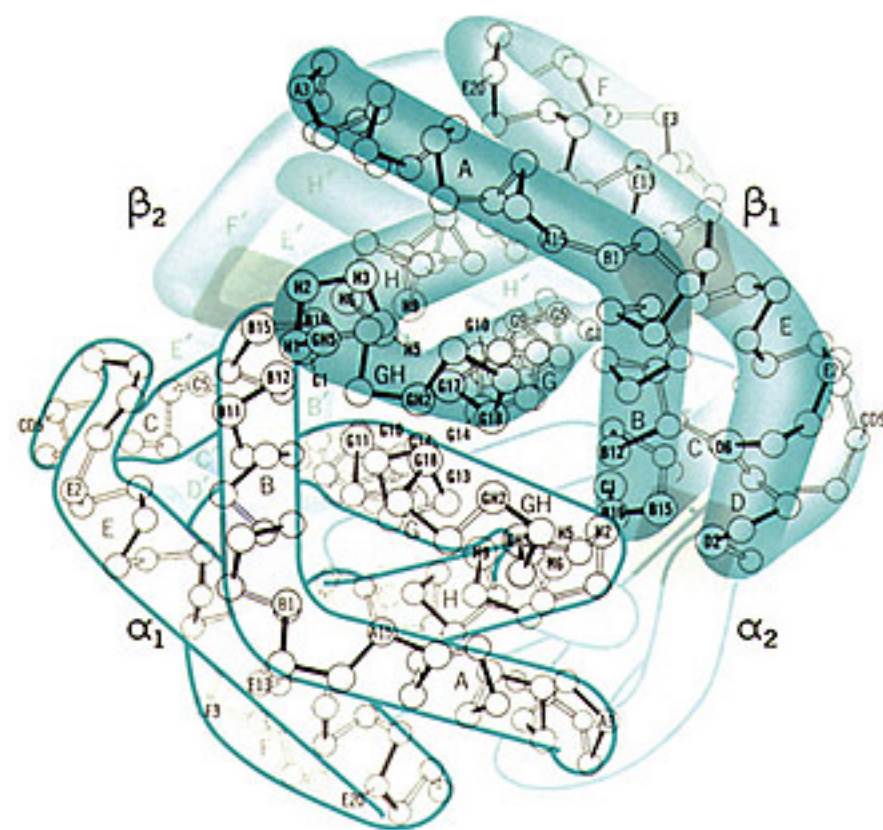
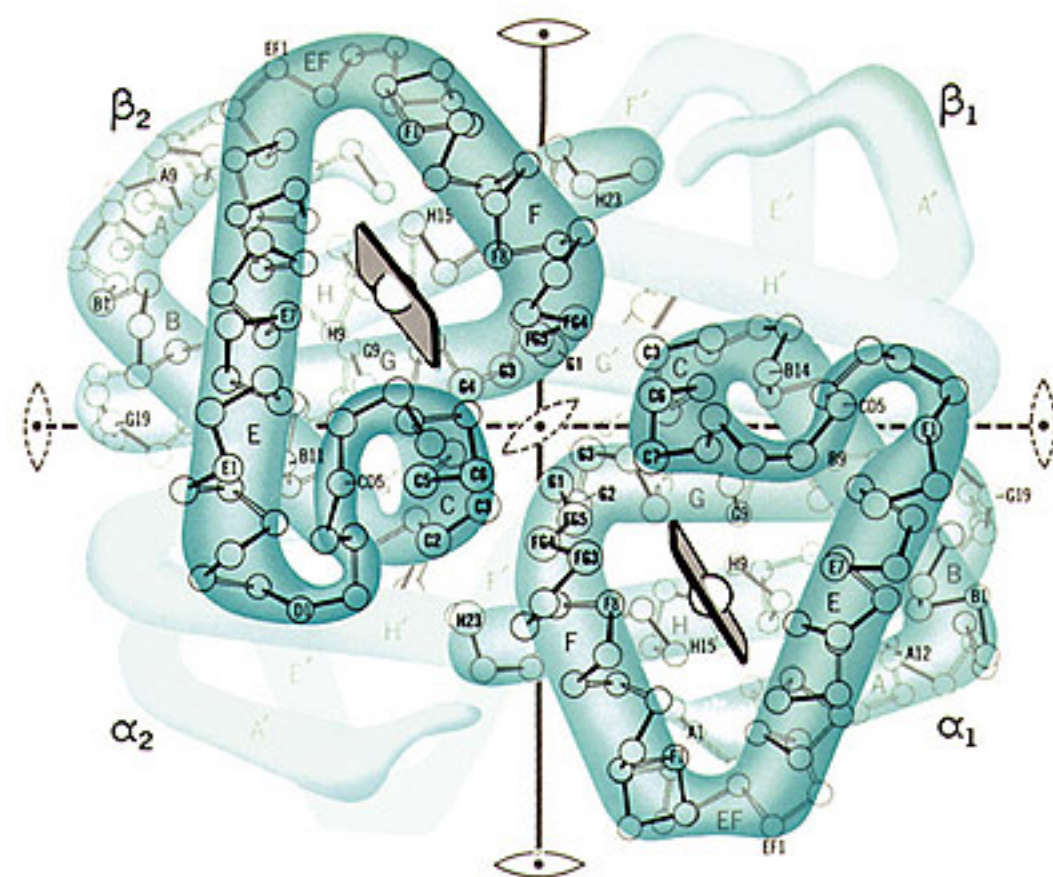
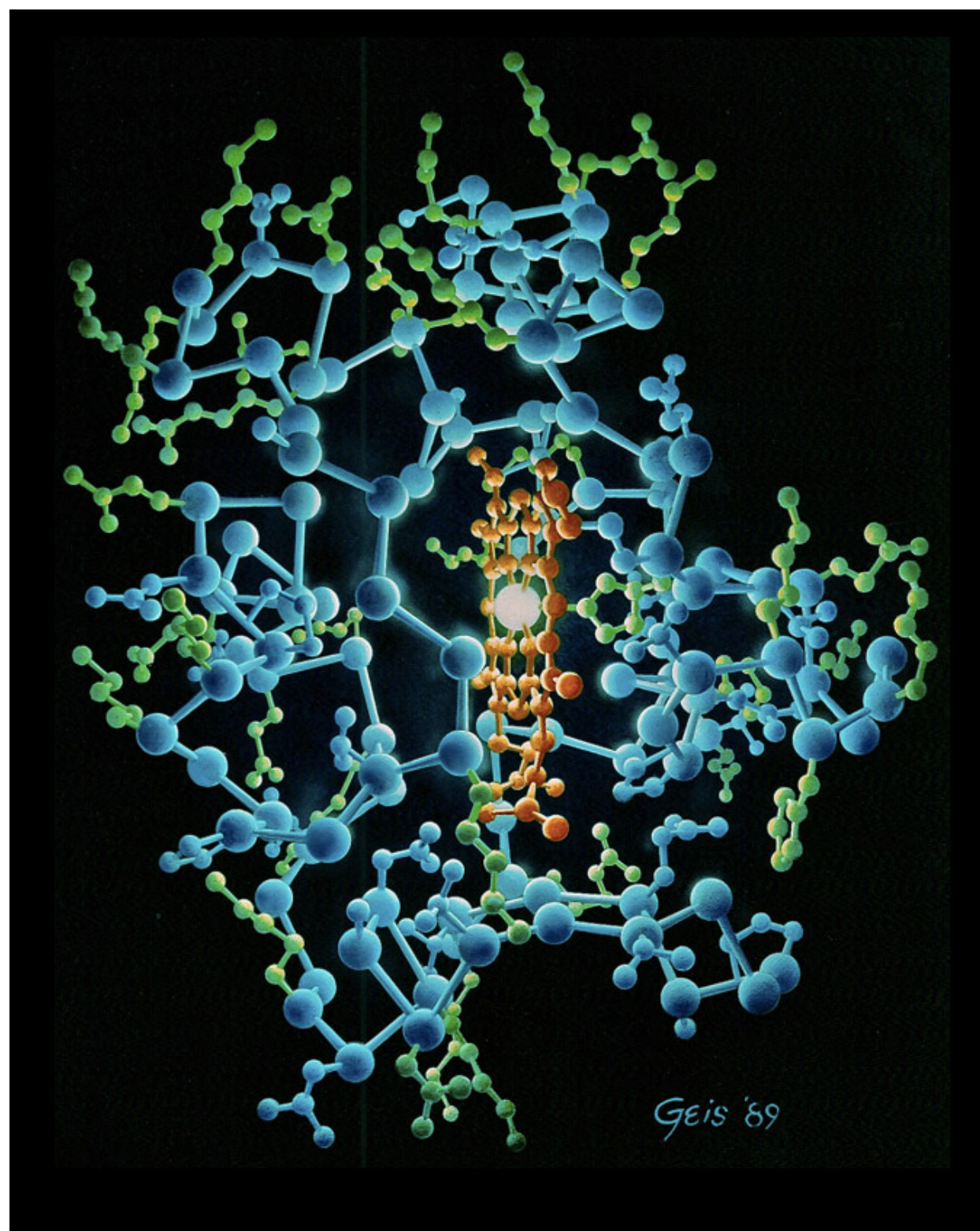
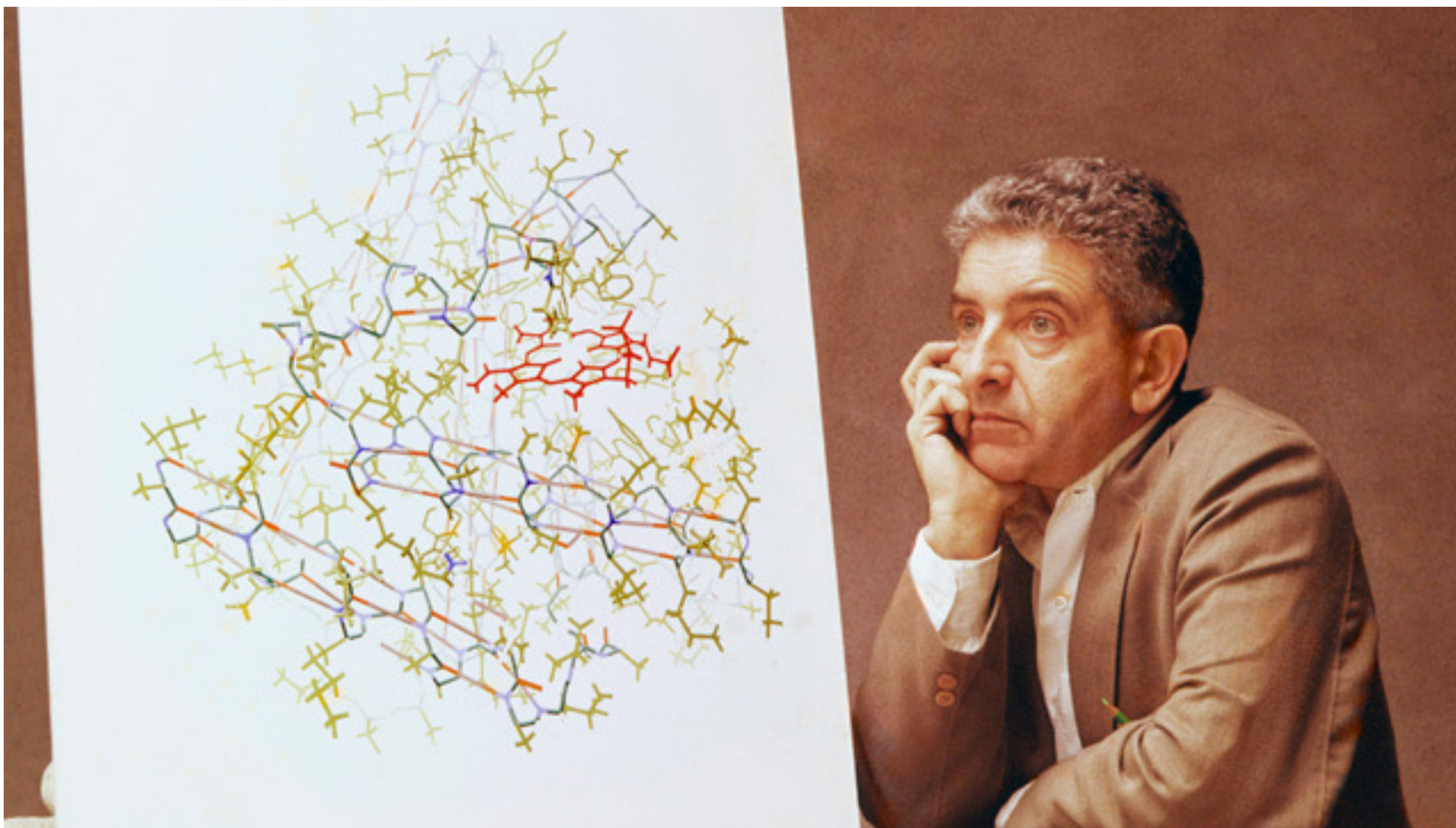


Fig. 3. Stereogram of the E-helix of myoglobin ([Kendrew et al., 1960](#)), reproduced from [Davies \(1965\)](#).





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“Irving Geis and his work-in-progress 1961 myoglobin painting” from the Irving Geis Collection. Rights owned and administered by the Howard Hughes Medical Institute. Reproduction by permission of the Howard Hughes Medical Institute.