Cuadernos de Investigación Geográfica. Tomo VIII-1982 - págs. 129-142

NOTA BIBLIOGRAFICA SOBRE PROCESOS GEOMORFOLOGICOS EN LADERAS

José Arnaez Vadillo*

En las dos últimas décadas, dentro del ámbito de la Geomorfología se han intensificado notablemente los estudios de procesos que entran a formar parte de una nueva concepción de la Geografía Física. En efecto, si hasta los años 60 dominaban los análisis descriptivos y se desarrollaba ampliamente la geomorfología histórica, a partir de esa fecha se van a intensificar los enfoques cuantitativos y experimentales, que ya tenían algún precedente en los trabajos realizados en los años 30 y 40 por Horton y otros autores.

Estos métodos han sido desarrollados fundamentalmente en los países anglosajones; de aquí que la lista bibliográfica que ofrecemos esté dominada por autores de esta área. Sin embargo, el interés que ofrece el nuevo tratamiento de los problemas de la Geografía Física ha servido para que numerosos geógrafos de otros países –incluyendo los españoles (SALA, M. y SALVADOR FRANCH, F., 1980; GARCIA QUIRANTES, J. y CHICANO, J.L.G., 1979 y los artículos incluidos en el presente volumen)– se sientan atraídos por esta línea de trabajo.

En la bibliografía nos hemos limitado a exponer las publicaciones llevadas a cabo a partir de los años 70 sobre procesos en laderas, aunque no hemos podido resistirnos a introducir algún trabajo anterior que consideramos básico o que ha servido de punto de partida a otros posteriores. Como es obvio, esta lista no pretende ser exhaustiva y en ella pueden echarse en falta muchos trabajos importantes. El objetivo de la misma es que sirva de complemento a los artículos publicados en este número así como de breve compendio de alguno de los temas de investigación que se han realizado en los últimos años sobre vertientes (funcionamiento hídrico, erosión, transporte...).

* Sección de Geografía de la Comunidad Autónoma de La Rioja.

- ANHERT, F., editor, 1976.- Quantitative slope models. *Zeitschrift für Geomorphologie.* Supplementband 25, 168 pp.
- ANDERSON, E.W., y FINLAYSON, B., 1975.- Instruments for measuring soil creep. *Tech. Bull. Br. Geomorph. Res. Grp.* 16, 32 pp.
- ANDERSON, E.W., y COX, N.J., 1978.-A comparison of different instrument for measuring soil creep, *Catena,* 5, 81-94.
- ANDERSON, M.G., y BURT, T.P., 1977.- A laboratory model to investigate the soil moisture condition on a drainage slope. *J. Hydrol.* 33, 383-390.
- ARMSTRONG, A., 1977.- A three-dimensional simulation of slope forms. *Z. Geomorph.,* Supple. 25, 20-28.
- ARNETT, R.R., 1976.- Some pedological features affecting the permeability of hillside slopes in Caydale, Yorkshire. *Earth Surface Processes,* 1, 3-16.
- ATKINSON, T.C., 1978.- Techniques for measuring subsurface flow on hillslope. In: *Hillslope hydrology* (ed. m.J. Kirkby), Wiley, Cichester, 73-120.
- BARENDREGT, R.W., y ONGLY, E.D., 1979.- Slope recession in the Onefour badlands, Alberta, Canada. An initial appraisal of contrasted moisture regimes. *Canadian Journal of Earth Sciences,* 16, 224-229.
- BARNES, B.S., 1944.- Subsurface flow. *Trans. Am. Geophys. Union,* 5.
- BARRY, R.G., 1969.- Evaporation and transpiration. In: *Water, Earth and Man* (ed. R.J. Chorley), Methuen, London, 169-184.
- BERRY, L., 1970.- Some erosional features due to piping and subsurface wash with special reference to the Sudan. *Geografiska Annaler,* 52 A (2), 113-119.
- BETSON, R.P., 1964.- What is watershed runoff? *J. Geophys. Res.,* 69, 1541-1552.
- BETSON, R.P., y MARIUS, J.B., 1969.- Source areas of storm runoff. *Water Res. Res.,* 5, 574-582.
- BISHOP, A.W., y MORGENSTERN, N.R., 1960.- Stability coefficients for earth slopes. *Geotechnique.,* 10, 29-150.
- BJERRUM, L., y JORSTAD, F., 1968.- Stability of rock slopes in Norway. *Publs. Norw. Geotech. Inst.,* 79, 1-11.
- BLACK, C., 1969.- Slopes in SW., Wisconsis, USA, periglaciar or temperate. *Bull. Peryglac.,* 18, 69-82.
- BLACK, P.E., 1970.- Runoff from watershed models. *Water. Res. Res.,* 6 (2), 456-477.
- BRADFORD, J.M., PIEST, R.F., y SPOMER, R.G., 1978.- Failure sequence

of gully headwalls in western Iowa. *Soil Science Society of America Journal*, 42, 323-328.

- BRUNDSDEN, D., y JONES, D.K.C., 1971.- The morphology of degraded landslide slopes in south west Dorset. *Engr. Geol.*, 5, 205-222.
- BRUNDSDEN, D., y JONES, D.K.C., 1974.- The evolution of landslide slope in Dorset, Phil., *Trans. R. Soc. A.*, 283, 605-631.
- BRUNSDEN, D., 1979.- Mass movements. In *Process in Geomorphology* (Embleton and Thornes Eds.), E. Arnold, 130-186, London.
- BRYAN, R.B., 1979.- The influence of slope angle on soil entraiment by scheetwash and rainsplash. *Earth Surface Processes*, 4, 43-58.
- BUNTING, B.T., 1961.- The role of seepage moisture in soil formation, slope development and stream initiaton. *Am. J. Sc.*, 259, 503-518.
- CALVER, A., KIRKBY, M.J., y WEYMAN, D.R., 1972.- Modelling hillslope and channel flow. In: *Spatial Analysis in Geomorphology*, (ed. R.J. Chorley), Methuen, London, 197-218.
- CAPPS, S., 1941.- Observations of the rate of creep in Idaho, *Am. J. Sci.*, 239, 25-32.
- CARSON, M.A., 1979.- Slope and slope processes. *Progress in Physical Geography*, 3 (1), 132-140.
- CARSON, M.A., y PETLEY, D.J., 1970.- The existence of threshold hillslopes in the denudation of the landscape. *Trans. Institute of Brit. Geographers*, 49, 71-95.
- CARSON, M.A., y KIRKBY, M.J., 1972.- *Hillslope form and process.* Univ. Press., Cambridge, 475 págs.
- CULLING, 1963.- Soil creep and the development of hillside slope. *J. Geol.*, 72, 127-161.
- CHAMBERLIN, T.W., 1972.- Interflow in the mountainous forest soils of coastal British Columbia. *Mountain Geomorphology*, ed. D. Slaymaker y H.J. Mepherson, Tantalus, Research Vancouver, 121-127.
- CHORLEY, R.J., 1980.- The hillslope hydrological cycle. In: *Hill-slope Hydrology* (ed. M.J. Kirkby), Wiley, Chichester, 1-42.
- DEDKOV, A.P., y DUGLAU, V.A., 1967.- Slow movements os soil masses on grassed slope. *Izv. Akad. Nauk SSSR, Serv. Geogr.*, 4, 90-93.
- DICKINSON, W.T., y WHITELEY, H., 1970.- Watershed areas contributing to runoff. *Internat. Assoc. Sci. Hydrology, Proc. Wellington Symposium*, Publication 96, 12-26.
- DUNIN, F.X., 1976.- Infiltrarion: its simulation for fields conditions. In: *Facets of hydrology* (ed. J.C. Rodda), Wiley, London, 199-229.

- DUNNE, T., 1970.- Runoff production in a humid area. *Rep. U.S. Dep. Agric. Res. Servi.*
- DUNNE, T., 1978.- Field studies of hillslope flow processes. In: *Hillslope Hydrology* (ed. M.J. Krkby), Wiley, Chichester, 227-293.
- DUNNE, T., 1980.- Formation and controls of channel networks. *Progress in Physical Geography*, 4 (2), 211-239.
- DUNNE, T., y BLACK, R.D., 1970.- An experimental investigation of runoff production in permeable soils. *Water Res. Res.*, 6, 478-490.
- DUNNE, T., y BLACK, R.D., 1970.- Partial area contributions to storm runoff in a small New-England watershed. *Water Res. Res.*, 6, 1296-1311.
- DUNNE, T., y BLACK, R.D., 1971.- Runoff processes during snowmelt. *Water Res. Res.*, 7, 1160-1172.
- EISBACHER, G.A., 1979.- Cliff collapse and rock avalanche in the Mackenzie Mountains, North western Canada. *Canadian Geotechnical Journal*, 16, 309-334.
- EMMET, W.W., 1970.- *The hydraulics of overland flow on hillslope.* U.S. Geol. Surv. Prof. Pap. 662-A: 68 págs.
- ENGELEN, G.B., 1973.- Runoff processes and slope development in badlands National Monument. South Dakota. *Journal of Hydrology*, 18, 57-79.
- EVERETT, K.R., 1963.- Slope movement, Neotoma valley, Southern Ohio. *Rep. Inst. Polar Stud.*, 6.
- FLETCHER, J.E., HARRIS, K., PETERSON, H.B., y CHANDLER, Y.N., 1954.- Piping. *Trans. Am. Geophy. Union*, 35, 258-262.
- FOSTER, G.R., editor, 1977.- *Soil erosión: prediction and control.* Soil Conservation of America, Special Publication 21, Ankeny, Iowa.
- FREEZE, R.A., 1972.- Role of subsurface flow in generating surface runoff. 1. Base flow contributions to channel flow. *Water Res. Res.*, 8 (3), 609-623.
- FREEZE, R.A., 1972.- Roleof subsurface flow in generating surface runoff. 2. Upstream sources areas. *Water Res. Res.*, 8 (5). 1272-1283.
- FREEZE, R.A. 1974.- Streamflow generation. *Review of Geophysics and Space Physics*, 12 (4), 627-647.
- GAGE, M., y BLANCK, R.D., 1979.- Slope stability and geologic investigations at Mangatu State Forest. *New Zealand Forest Service, Forest Research Institute Technical* Paper 66.
- GARDNER, J.S., 1979.- The movement of material on debris slopes in the Canadian Rocky Mountains. *Zeitschrift für Geomorphologie*, NF 23, 45-57.
- HARR, R.D., 1977.- Water flux in soil and subsoil on a steep fores-ted slope. *J. Hydrol.*, 33, 37-58.

- HARRIS, C., 1972.– Processes of soil movement in turf-banked solifluction lobes, Okstindan, Northern Norway. *Inst. Br. Geogr. Spec. Publ. 5,* 155-174.
- HAYWARD, J.A., 1980.- *Hydrology and stream sediment from Torlesse Stream Catchment.* Tussock Grassland-Mountain Lands Institute, 236 pág., Nueva Zelanda.
- HEEDE, B.H., 1971.- Characteristics and processes of soil piping in gullies. *U.S. Dep. Agric., Forest Serv. Res. Pap. RM-68,* 15-21.
- HEWLETT, J.D., y HIBBERT, A.R., 1963.- Moisture and energy conditions within a sloping soil mass during drainage. *J. Geophys. Res.,* 68, 1081-1087.
- HEWLETT, J.D., y NUTTER, W.L., 1970.- The varyng source area of streamflow from uplands basins. *Paper presented at Symposium on Interdisciplinary Aspects of Watershed Management, Montana State University,* Bozeman, American Society of Civil Engineers, New York, 65-83.
- HILLEL, D., 1971.- *Soil and water: Physical Principles and Processes.* Academic Press, New York and London, 288 pp.
- HORTON, R.E., 1933.- The role of infiltration in the hydrological cycle. *Trans. Am. Geophy. Un.* 14, 446-460.
- HORTON, R.E., 1938.- The interpretation and application of runoff plot experiments with reference to soil erosion problems. *Proc. Soil Sci. Soc. Am.,* 3, 340-349.
- HORTON, R.E., 1945.- Erosional development of streams and their drainage basins: hydrophysical approach to quantitative morphology. Bull. Geol. Soc. Am., 56, 275-330.
- HORTON, R.E., LEACH, H.R., y VAN VLIET, R., 1934.- Laminar sheet flow. *Trans. Am. Geophys. Jni., Hydrology,* 2, 393 404.
- HOWARD, A.D., 1971.- A simulation model of stream capture. *Geological Society of America Bulletin,* 82, 1355-1357.
- HURSH, C.R., y BRATER, E.F., 1941.- Separating storm hydrographs from small drainage areas into surface and subsurface flow. *Trans. Am. Geophys. Union,* 863-870.
- HUTCHINSON, J.N., 1971.- Mass movement. In: *Encyclopaedia of Earth Sciences* (ed. R.W. Fairbridge), Reinhold, New York, 688-695.
- HUTCHINSON, J.N., 1974.- Periglacial solifluxion: an approximate mechanism for clayey soils. *Geotechnique* 24, 438 443.
- HUTCHINSON, J.N., y BRUNSDEN, D., 1975.- Mudflows: a review and classification (Abstract), *Q.J. Engng. Geol.,* 7, 1-5.
- IMESON, A.C., y KWAAD, F.J., 1976.- Some effects of burrowing animals and slope processes in the Luxembourg Ardennes. *Geogr. Ann.,* 58, 317-328.

- IZZARD, C.F., 1944.- The surface profile of overland flow. *Trans. Am. Geophy. Union*, 25, 956-968.
- JONES, J.A., 1971.- Soil piping and stream channel initiaton. *Water Res. Res.* 7 (3), 602-610.
- JONES, J.A., 1976.- *Soil piping and the subsurface initiaton of stream channel networks*, Ph. D. dissertation., Univ. Cambridge.
- KIRKBY, M.J., 1963.- *A study of rates of erosion and mass movement on slopes, with special reference to Galloway*, Unpubli. Ph. D. Thesis, Univ. Cambridge.
- KIRKBY, M.J., 1967.- Measurement and theory of soil creep. *J. Geol.* 75, 359-378.
- KIRKBY, M.J., 1969.- Infiltration, throughflow and overland flow. In: *Water, Earth and Man* (ed. R.J. Chorley), Methuen, London, 215-227.
- KIRKBY, M.J., 1976.- Hydrological slope model. The influence of climate. In: *Geomorphology and climate* (ed. E. Derbyschire), Wiley, London.
- KIRKBY, M.J., 1977.- Soil developmennt models as a component of slope models. *Earth Surface Processes*, 2, 203-230.
- KIRKBY, M.J., y CHORLEY, R.J., 1967.- Overland flow, throughflow and erosion. *Bull. Internant. Assoc. Sci. Hydrology*, 12 (2), 5-21.
- KIRKBY, M.J., y WEYMAN, D.R., 1973.- Measurement of contributing area in very small drainage basins. *Univ. of Bristol Geogr. Seminar Papers, Series B, 3*, 12 pp.
- KIRKBY, M.J., y otros, 1976.- Measurement and modelling of dinamic contributing areas in very small catchments. *Leeds University, Department of Geography, Working Paper* 167, 35 pp.
- KNAPP, B.J., 1970.- Patterns of soil water movement on a steep upland hillside, Central Wales. *Unpublished Ph. D. thesis, Reading Univ.*, 213 pp.
- KNAPP, B.J., 1970.- A note on throughflow and overland flow on steep mountains watersheds. *Reading Geographer*, 1, 40-43.
- KNAPP, B.J., 1974.- Hillslope throughflows observation and the problem of modelling. *Institute of British Geographers, Special Publication, 6*, 23-31.
- LAM, K.C., 1977.- Pattern and rates of slopewash on the badlands of Hong Kong. *Earth Surface Processes* 2, 319-332.
- LEOPOLD, L.B., EMMETT, W.W., y MYRCK, R.M., 1966.- Channel and hillslope processes in a semiarid area, New Mexico. *U.S. Geol. Surv. Prof. Paper 352 G*, 193-253.
- LI, R.M., 1972.- *Sheet flow under simulated rainfall*, M.S. thesis, Fort Collins, Colorado, Colorado State Univ., 88 pp.

- LOWDERMILK, W.C., 1934.- The role of vegetation in erosion control and water conservation. *J. Forestry*, 32, 529-536.
- LUK, 1978.- Soil erodibility in southern Alberta. *Geografiska Annaler.* 60 A, 143-149.
- MELTON, M.A., 1960.- Intravalley variations in slope angle related to microclimate and erosional environment. *Geological Society of America Bulletin*, 71, 133-144.
- MELTON, M.A., 1965.- Debris-covered hillslope of the Southern Arizona desert-consideration of their stability and sediment contribution. *J. Geol.*, 73, 715-729.
- MEYER, L.D., y MONKE, E.J., 1965.- Mechanics of soil erosion by rainfall and overland flow. *Trans. Am. Soc. Agr. Engrs.*, 8, 572-577.
- MONKE, E.J., MARELLI, H.J., MEYER, L.D., y DE JONG, J.F., 1977.- Runoff, erosion and nutrient movement from inter-rill areas. *Transsactions of American Society of Agricultural Engineers*, 20, 58-61.
- MORGAN, R.P.C., 1978.- Field studies of rainsplash erosion. *Earth Surface Processes*, 3, 295-300.
- MOSLEY, M.P., y O'LOUGHLIN, C., 1980.- Slopes and slopes processes. *Progress in Physical Geography*, 4 (1), 97-106.
- MUSGRAVE, G.W., 1935.- The infiltration capacity of soil in relation to the control os surface runoff and erosion. *J. Am. Soc. Agronomy*, 27, 336-345.
- NEAL, J.H., 1938.- The effects of the degree of slope and rainfall characteristics on runoff and soil erosion. *Missouri Agricultural Experiment Station, Res. Bull.* 280.
- NUTTER, W.L., 1973.- The role of soil water in the hydrologic behavior of uplands basin. *Field Soil Water Regime (Soil Science Society of America)*, 181-193 pp.
- OVERTON, D.E., 1974.- Mechanics of the surface runoff on hill-slopes. *Proceeding of the 3rd International Seminar for Hydrology Professors*, Biological effects in the Hydrological Cycle (Purdue University, Department of Agricultural Engineers, West Lafayette), pp. 186-210.
- PAINTER, R.B., BLYTH, K, MOSEDALE, J.C., y KELLY, M., 1974.- The effect of afforestation on erosion processes and sediment yield. In: *Effects of man on the physical environment.*, International Association of Hydrological Sciences Publication, 113, 162-168.
- PARK, C.C., 1976.- The relation of slope and stream-channel form in the river Dart, Devon, *Journal of Hydrology*, 29, 139-147.
- PARSONS, R.J., 1977.- Curvature and rectilinearity in hillslope profiles. *Area*, 9, 246-251.

- PATRIC, J.H., DOUGLASS, J.E., y HEWLETT, J.D., 1965.- Soil water absorption by mountain and piedmont forest. *Proc. Soil. Sci. Am.*, 29 (3), 303-308.
- PEARCE, A.J., 1976.- Magnitude and frequency of erosion by Hortonian overland flow. *J. Geol.*, 84, 65-80.
- PEGG, R.K., y WARD, R.C., 1972.- Evapotranspiration from a small clay catchment. *J. Hydrology*, 15, 149-165.
- PETRYCK, A., y BOSMAJIAN, G., 1975.- Analysis of flow through vegetation. *J. Hydraul. Div. Am. Soc. Civ. Engrs.*, 101, 1105-1120.
- PHILIP, J.R., 1957.- The theory of infiltration. *Soil Sci.*, 83, 345-357, 435-448; 84, 163-177, 257, 329-339; 85, 278-286, 333-336.
- PIERSON, T.C., y MOSLEY, M.P., 1978.- Erosion and deposition by debris flow in the Bullock Creeck Catchment, Mount Thomas State Forest, North Canterbury. *New Zealand Forest Service, Protection Forestry Division, Geohydrology Report 162.*
- PILGRIM, D.H., y HUFF, D.D., 1978.- A field evaluation of subsurface and surface runoff, I: tracer studies. *Journal of Hydrology*, 38, 319-341.
- PILGRIM, D.H., y HUFF, D.D., y STEELE, T.D., 1978.- A field evaluation of subsurface and surface runoff, II: runoff processes. *Journal of Hydrology*, 38, 299-318.
- RAWITZ, E., ENGMAN, E.T., y CLINE, G.D., 1970.- Use of the mass balance method for examining the role of soils in controlling watershed perfomance. *Water Res. Res.*, 11, 102-110.
- REE, W.O., 1939.- Some experiments on shallow flows over grassed slope. *Trans. Am. Geophys. Union*, 20, 653-656.
- RODINE, J.D., 1974.- *Analysis of the mobilization of debris flows.* Final Report to U.S. Army Research Office, Durham, North Carolina, USA (226 pág.).
- RODINE, J.D., y JOHNSON, A.M., 1976.- The ability of debris, hevily freighted with coarse clastic materials, to flow on gentle slopes. *Sedimentology*, 23, 213-234.
- RUDBERG, S., 1964.- Slow mass movements, processes and slope development in the Norva Storfjall area, Southern Swedish Lapland. *Z. Geomorph., Supp. Bd. 5*, 192-203.
- RUHE, R., 1975.- Climatic geomorphology and fully-developed slopes. *Catena*, 2, 309-320.
- SAVIGEAR, R.A.G., 1956.- Technique and terminology in the investigation of slope forms. *International Geographical Union, First Report of the Commission for the study of slopes*, 66-75.

- SCHUMM, S.A., 1956.- The role of creep and rainwash in the retreat of badland slope. *Am. J. Sc.*, 254, 693-706.
- SCHUMM, S.A., 1962.– Erosion on miniature pediments in Badlands National Monument, South Dakota, *Bull. Geol. Soc. Am.*, 73, 719-24.
- SCHUMM, S.A., 1967.- Rates of surficial rock creep on hillslopes in western Colorado, *Science*, N. 4, 115, 560-561.
- SELBY, M.J., 1979.- Slope stability studies in New Zealand. In: *Physical Hydrology: New Zealand experience* (ed. D.L. Murray y P. Ackroyd), Wellington, 120-134.
- SHEN, H.W., y LI, R.M., 1973.- Rainfall effects on sheet flow over smooth surface. *Proc. Am. Soc. Civil Engr.*, 99. 771-792.
- SMITH, R.E., y WOOLHISER, D.A., 1971.- Overland flow on an infiltrating surface. *Water Res. Res.*, 7, 899-913.
- SMITH, y BRETHERTON, F.P., 1972.- Stability and the conservation of mass in drainage basin evolution. *Water Res. Res.*, 8, 1506-1529.
- STATHAM, I., 1973.- Scree slope development under conditions of surface particle movement. *Trans. Inst. Br. Geogr.*, 59, 41-53.
- STATHAM, I., 1976.- A scree slope rockfall model. *Earth Surface Processes*, 1, 43-62.
- STATHAM, I., 1978.- *Earth surface sediment transport.* Oxford University Press.
- SWARTZENDRUBER, D., y HILLEL, D., 1975.- Infiltration and runoff for small field plots under constant intensity rainfall. *Water Res. Res.*, 11, 445-451.
- TAYLOR, D.W., 1937.- Stability of earth slopes. *J. Boston Soc. Civ. Engrs.* 24, 197-246.
- TEMPLE, P.H., 1972.- Measurements of runoff and soil erosion at an erosion plot scale, with particular reference to Tanzania. *Geografiska Annaler*, 54 A, 203-220.
- THORN, 1979.- Ground temperatures and surficial transport in colluvium during snowpatch meltout, Colorado Front Range. *Artic and Alpine Research*, 11, 41-52.
- THORNES, J.B., 1971.- State, attribute and environment in scree slope studies. *Inst. Br. Geor. Spec. Publ.*, 3, 49-64.
- THORNES, J.B., 1975.- Lithological control of hillslope erosion in the Soria area, Duero Alto, Spain. *Bol. Geol. Min.*, 85, 11-19.
- TISCHENDORF, W.G., 1969.- *Tracing stormflow to varying source area in small forested watershed in the Southeastern Piedmont.* Ph. D. dissertation, Univ. Georgia, Georgia, 114 pág.

- WALKER, P.H., KINNEL, P.I.A., y GREEN, P. 1978.- Transport of a non-cohesive sandy mixture in rainfall and runoff experiments. *Soil Science Society of America Journal*, 42, 793-800.
- WEYMAN, D.R., 1970.- Throughflow on hillslopes and its relation to the stream hydrograph. *Bull. Internat. Assoc. Sci. Hydrology*, 15 (2), 25-33.
- WEYMAN, D.R., 1973.- Measurement of downslope flow of water in a soil. *Journal of Hyedrology*, 20, 267-288.
- WEYMAN, D.R., 1974.- Runoff process, contributing area and streamflow in a small upland catchment. *Spec. Publ. Inst. Br. Geogr.*, núm. 6, 33-43.
- WHIPKEY, R.Z., y KIRKBY, 1980.- Flow within the soil. In: *Hillslope Hydrology* (ed. M.J. Kirkby), Wiley, London, 121-143.
- SILSON, T.V., y LIGON, J.T., 1973.- The interflow process on sloping watershed areas. *Water Res. Res. Inst. Clemson Univ., Report núm. 38,* 58 págs.
- WOOD, A., 1942.- The developmenr of hillside slopes. *Proc. Geol. Ass.*, 53, 128-140.
- YAIR, A., 1973.- Theoretical considerations on the evolution of convex hillslopes. *Z. Geomorph. Suppl. Dd., 18,* 1-9.
- YAIR, A., y KLEIN, M., 1973.- The influence of surface properties on flow and erosion processes on debris-covered slopes in an arid area, *Catena,* 1, 1-18.
- YOON, Y.N., y WENZEL, H.G., 1971.- Mechanics of sheet flow under simulated rainfall. *Proc. Am. Soc. Civil Engrs.*, 97. 1367-1368.
- YOUNG, A., 1960.- Soil movement by denudation processes on slopes. *Nature,* 188, 120-122.
- YOUNG, 1963.- Deductive models of slope evolution. *Rep. In. Geogr. Un., Slopes Commission 3,* 45-66.
- YOUNG, A., 1974.- The rate of slope retreat. In: Progress in geomorphology (ed. E.H. Brown y R.S. Waters). *Spec. Publ. Ins. Br. Geogr. 7,* 65-78.
- YOUNG, A., 1977.- The caracteristics and origin of coarse debris deposits near Wollogong, New South Wales, Australia, *Catena,* 4, 289-307.
- YOUNG, A., 1978.- A twelve years record of soil movement on a slope. *Zeitschrift für Geomorphologie, Suppl. 29,* 104-110.